

**Report of the  
Comptroller and Auditor General of India  
on  
Revenue Sector  
for the year ended 31 March 2012**

**(Performance Audit on Forest Receipts)**

**Report No. 5  
Government of Assam**

# TABLE OF CONTENTS

Particulars	Paragraph	Page
Preface		iii
Executive Summary		iv-vii
<b>CHAPTER-1 : GENERAL</b>		
Introduction	1.1	1
Organisational set up	1.2	3
Scope of audit	1.3	3
Audit objectives	1.4	3
Acknowledgement	1.5	4
Trend of forest receipts	1.6	4-5
<b>CHAPTER-II :TIMBER</b>		
Working Plans	2.1	7
Non-revision of the Working Plans according to National Working Plan Code	2.1.1	7
Non-continuation of silvicultural operations	2.1.2	8
Disposal of illegally/windfallen timber/timber obtained from de-reservation of forest for various projects	2.2	10
Deficiencies in the system of timber sale	2.2.1	10
Fixation of 'base price' for sale of timber	2.2.2	13
Functioning of Forest Utilisation Officer	2.3	14
Failure to supply timber requisitioned – loss of revenue	2.3.1	15
Outgo of Government money	2.3.2	15
Management of hammers	2.4	16-18
<b>CHAPTER-III : BAMBOO</b>		
Introduction	3.1	19
Management of bamboo resources	3.2	19
Non-finalisation of Working Plans	3.3	20
System of extraction of bamboo in the State	3.4	21

Non-revision of WP of quota allotted to Ashoka Paper Mills	3.5	23
Supply of bamboo at 'Air dried' method instead of 'Green' method	3.6	23-24
Non-supply of additional quota to HPC	3.7	25
<b>CHAPTER-IV : MINOR FOREST PRODUCE</b>		
Fixation of royalty rates	4.1	27-30
Non-revision of rates of royalty of minor forest produce	4.2	30-31
Non-application of nearest <i>mahal</i> rate while issuing permits	4.3	31
Extraction of minor forest produce by National Highway Authority of India	4.4	32-35
Loss of working period of sand, stone and boulders <i>mahals</i>	4.5	35-36
<b>CHAPTER-V : OTHER POINTS OF INTEREST</b>		
Control mechanism on extraction of forest produce	5.1	37
Penal provisions for illegal extraction of minor forest produce	5.2	38
Provision for levy of interest for delayed payments	5.3	39
Functioning of internal audit wing	5.4	40
Revenue optimisation measures	5.5	40
Levy fees	5.6	41-42
<b>CHAPTER-VI : CONCLUSION AND RECOMMENDATIONS</b>		
Conclusion	6.1	43-44
Summary of recommendations	6.2	44-45
Annexure		47-49

## **PREFACE**

This Report on Performance Audit on 'Forest Receipt' has been prepared for submission to the Governor of Assam under Article 151(2) of the Constitution of India.

The audit of revenue receipts of State Governments is conducted under Section 16 of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971. General information about the receipts and other issues, results of audit during 2011-12 relating to other tax and non-tax revenues of the Government of Assam have been included in the Report of the Comptroller and Auditor General of India on Revenue Sector for the year ended March 2012, Government of Assam. This Report presents the results of a performance audit conducted on the 'Forest Receipts' of the Government of Assam covering the period from 2006-07 to 2010-11.

Forest receipts are mainly generated from sale of timber, bamboo and minor forest produce like sand, stone and boulders and thus, the audit findings have been classified under similar categories namely – 'Timber', 'Bamboo', 'Minor forest produce' and 'Other points of interest' and presented in separate Chapters.

## EXECUTIVE SUMMARY

**This Report contains the results of a performance audit on 'Forest Receipts' of Government of Assam for the period 2006-07 to 2010-11 involving revenue implication of ₹ 1,154.43 crore.**

### Major Audit Findings

- There was mismatch between the actual receipts and budget estimates during all the years except 2010-11.

*(Paragraph 1.6)*

- The Government of Assam's order of September 2009 to sell timber by fixing the average of last three sale price was envisioned to maximise revenue yield above the royalty rates. However, in fact, the average of last three sale price remained close to the royalty rates and far below the level of market rates except in one occasion only.

*(Paragraph 2.2.2)*

- Only 241 out of 1,248 hammers available in the Divisions were in use. Further, 38 hammers have since been missing/lost from the Divisions as per the information furnished to Audit.

*(Paragraph 2.4)*

- Non-finalisation of Working Plans of bamboo in respect of three Divisions had led to loss of revenue of ₹ 1.86 crore.

*(Paragraph 3.3)*

- The market price/price at which Hindustan Paper Corporation authorities procure bamboo from Assam is about ₹ 10 while the cost of extraction and transportation upto HPC mill gate per bamboo is ₹ 2. However, the Government of Assam gets around ₹ 1 per bamboo, *i.e.* the least of all the components while the contractors supplying bamboo to HPC are benefitted of substantial percentage of the sale value.

*(Paragraph 3.4)*

- Due to the failure of the Environment and Forest Department to initiate timely action to renew the Working Plan after expiry of erstwhile bamboo lease of M/s Ashoka Paper Mill (which is defunct) after September 2004,

the quota of atleast 60,000 MT per annum could not be allotted to the mills of HPC. This could have enabled generation of additional revenue of ₹ 7.38 crore.

(Paragraph 3.5)

- The HPC authorities purchase bamboo from Assam at ‘Air Dried method’ whereas they procure bamboo from other sources at ‘Green’ method. Consequently, while purchasing 97,819 MT bamboo from contractors of Assam at ‘Air Dried method’ the HPC authorities got 3.42 crore bamboo. Had the system been similar with other sources *i.e.* purchase on ‘MT Green’ basis, 3.42 crore bamboo would have made 1,95,429 MTG leading to recovery of revenue of ₹ 2.36 crore. This resulted in loss of revenue of ₹ 1.18 crore.

(Paragraph 3.6)

- Implementation of the methodology of working out the royalty on the basis of study carried out by the Environment and Forest Department at periodical interval, would have enabled the Government of Assam to ensure that the royalty rates are fixed on more scientific basis and aligned with the market rates which would have benefitted the State exchequer and also ensured that there is no undue benefit to the contractors dealing in forest produce. Considering the minor forest produce extracted from seven selected Divisions during 2006-07 to 2010-11, Government of Assam was deprived of generating additional revenue of ₹ 76.13 crore.

(Paragraph 4.1)

- The Government of Assam ordered for granting permits on payment of a price at the nearest *mahal* rate. However, it was noticed in seven selected Divisions that while issuing permits for extraction of sand, stone, boulders etc. during 2006-07 to 2010-11, they applied the rates of royalty leading to loss of revenue of ₹ 84.57 crore.

(Paragraph 4.3)

- Irregular and unjust decision of the Government on extraction of sand, stone, boulders on payment of royalty ignoring (i) clear notings at various levels against the same, (ii) the proposal of Commissioner and Secretary (Environment and Forest) to obtain undertaking from National Highway Authority of India about payment of balance royalty if higher rates are determined at later date and most importantly (iii) the facts disclosed in the letter of NHAI which clearly mentioned allotment of works to contractors allowing price of sand, stone, boulders at much higher rates than the royalty rates would not only cause loss of revenue to the tune of ₹ 844.94 crore to the Government exchequer, it would also extend undue gain to the private parties (contractors) of the equal amount.

(Paragraph 4.4)

- The ‘Assam Minor Mineral Concession Rules’ which came into force from 1994 envisages levy of penalty for illegal extraction of minor forest produce at four times. Further, the orders of the Environment and Forest Department issued in 1992 provides for levy of monopoly fee at 200 *per cent* in cases of illegal extraction of forest produce. However, the forest Divisions while dealing with cases of illegal extraction of minor forest produce were still imposing 200 *per cent* monopoly fee as per earlier orders of the Department instead of four times of the royalty as laid down in the Assam Minor Mineral Concession Rules.

*(Paragraph 5.2)*

- States having considerable forest cover like Odisha, Madhya Pradesh etc. have initiated certain steps for optimising revenue from available resources and identifying new avenues for mobilisation of additional resources. However, the Government of Assam or the Environment and Forest Department has not yet initiated similar measures.

*(Paragraph 5.5)*

### **Conclusion**

There is a need to re-design the existing Working Plans/preparing the Working Plans in the lines of National Working Plan Code so that silvicultural operations of timber could be commenced which would ensure flow of legal timber in the market. This would largely contain illegal felling and generate revenue for the State exchequer. The base price for sale of timber on auction needs to be linked with the prevalent market rates of timber. Effective management of the available bamboo resources in the State would enable generation of revenue of more than ₹ 50 crore per annum from sale of bamboo only. Implementation of the methodology of the study carried out by the Environment and Forest Department for fixing rates of royalty at periodic intervals in respect of minor forest produce would ensure that the rates are fixed in line with the market rates. This would help the State exchequer with additional resources and ensure that there is no undue benefit to the contractors. Irregular and unjust decision of Government of Assam on extraction of sand, stone, boulders on payment of royalty ignoring the previous decisions against the same has led to huge loss of revenue while extending undue benefit to the contractors. The penal and interest provisions available in the Assam Minor Mineral Concession Rules were not being enforced by the forest Divisions. Initiation of revenue optimisation measures would help in maximising revenue from available resources as well as identify new avenues for mobilisation of additional resources. A proper system of reports/returns would enable the higher authorities in the Environment and Forest Department to monitor the activities of the Department. Utilising the internal audit wing more effectively would enable the Environment and Forest Department to ensure that the activities of the Department were functioning reasonably well.

## Major Recommendations

- *Steps may be initiated to revise the existing Working Plans which are in currency/prepare the Working Plans in accordance with the format of National Working Plan Code prescribed by Ministry of Environment and Forests, Government of India for exploitation of available forest resources;*
- *system of supplying bamboo to HPC through contractors appointed by it may be revisited to replace it with a system of putting the bamboo coupes under sale through mahal operation;*
- *the orders for revising the rates of royalty by 15 per cent every two years and also the orders for application of nearest mahal rates while issuing permits for extraction of minor forest produce need to be revisited. Instead, the methodology for fixation of royalty at periodical interval calculated on prescribed percentage of the market rates as per the study conducted by Environment and Forest Department in 2003 may be implemented;*
- *the decision of allowing contractors of NHAI to extract sand, stone, boulders etc. at 'simple royalty' despite availability of the details of the rates at which work orders were issued by the NHAI to its contractors needs to be investigated; and*
- *measures for revenue optimisation need to be initiated for maximising revenue from available forest resources and identifying new avenues for mobilisation of additional resources.*





**CHAPTER – I  
GENERAL**

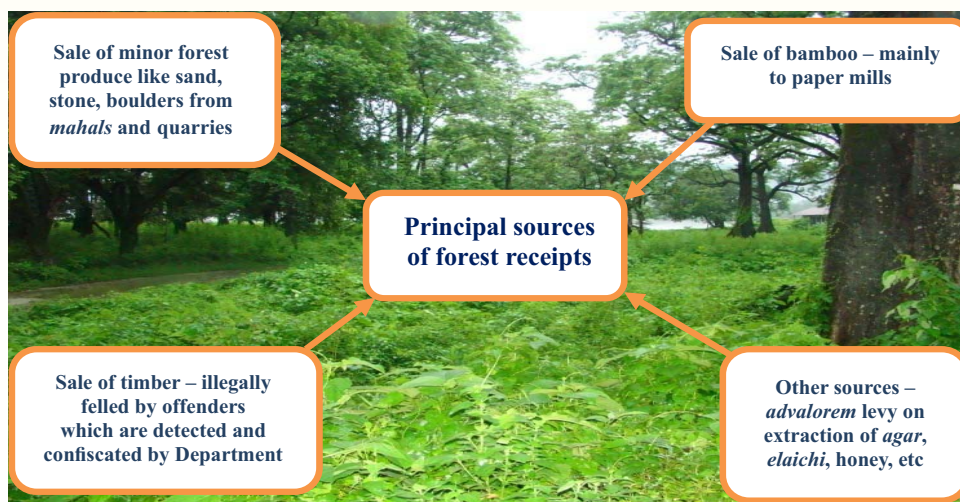




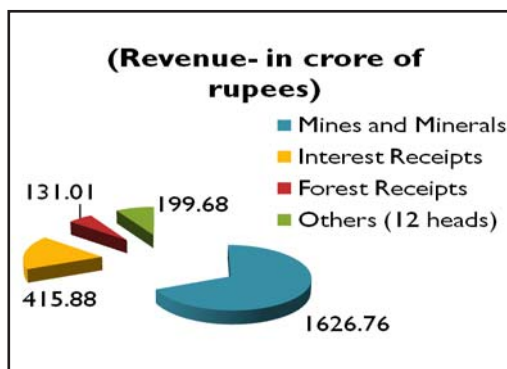
# CHAPTER I GENERAL

## 1.1 Introduction

The subject 'Forests' is included in the 'Concurrent List' of the seventh schedule to Article 246 of the Constitution of India. The Indian Forests Act, 1927 and Forest Conservation Act (FC Act) 1980 which are Central Legislations and the Assam Forest Regulation, 1891 (AFR); Assam Sale of Forest Produce Coupes and *Mahals* Rules, 1977; Assam Minor Mineral Concession Rules (AMMCR), 1994 as amended and notifications/orders issued thereunder from time to time govern management and control of forestry and realisation of revenue by way of royalties, fees and penalties from various forest produce. The principal forest produce wherefrom revenue is generated are timber, bamboo and other non-wood forest produce like sand, gravel, stone, *agar*, *elaichi* and honey as depicted in the following diagram.



Forest receipts are non-tax receipts and during the period 2006-07 to 2010-11 accounted for 2.31 to 5.83 *per cent* of the total non-tax receipts of Government of Assam (GOA). In order to ensure balanced audit coverage on tax and non-tax receipts, attempt is made each year to ensure that the topics of non-tax receipts are given due attention. In case of non-tax receipts of GOA,



receipts from mines and minerals, interest receipts and forest receipts are the principal contributors in the descending order. Mines and Minerals receipts have been reviewed and included in Audit Report 2009-10, while the scope of audit in interest receipts and recommending areas for optimising resources is limited, hence 'forest receipts' being the third highest contributor in non-tax receipts has been selected as a topic of performance audit for the current year.

As envisaged in the 'National Working Plan Code' prepared and issued by the Ministry of Environment and Forests (MoEF), Government of India (GOI) in 2004– "in a developing country like ours, economic growth and ecological balance depends, to a great extent, on judicious use of its natural resources". In the 'Assam Forest Policy 2004', the GOA has also emphasised on maximising economic return from the available sources.

The regular felling and sale of timber has been stopped in the State of Assam after the ban (1985) of GOA. This has compelled the GOA to focus to sale of bamboo and other non-wood forest produce like sand, stone, gravel etc. for generation of revenue. At present, major revenue is generated from the operation of *mahal*<sup>1</sup> and issue of permits mainly from the riverine *mahals* and other hill quarries, auction sale of seized timber (illegally felled by miscreants and seized by forest officials). Further, under the FC Act, it is necessary to obtain prior approval of the GOI for use of forest land for non-forestry purposes on payment of "Net Present Value (NPV)" prescribed by the GOI. However, the moneys so collected on account of NPV by the GOA and all other State Governments are to be transferred to a Central fund named "Compensatory Afforestation Management and Planning Authority (CAMPA)" maintained by the GOI which re-distributes the same to the State Governments for afforestation purposes. Hence, the money collected under diversion of forest land for non-forestry purposes by the GOA have not been covered in this performance audit.

This performance audit on 'forest receipts' is thus essentially conducted to ascertain whether steps taken by the GOA to optimise revenue from forest resources were adequate and that the resources available for exploitation were tapped optimally to augment revenue in the best interest of the State. The performance audit revealed a number of deficiencies and points out a number of avenues which have the potential to generate substantial revenue from forest resources. These are discussed in the succeeding Chapters.

---

<sup>1</sup> A well defined area from where certain types of forest produce are sold.

## 1.2 Organisational set up

The Principal Secretary to the GOA, Environment and Forest (E&F) Department is in overall charge of the Department at the Government level. At the Department level, the E&F Department is headed by the Principal Chief Conservator of Forests (PCCF) who is assisted by seven Chief Conservators of Forests (CCF) and 19 Conservators of Forests (CF). There are 21 Territorial forest divisions each headed by Deputy Conservator of Forest (DCF)/Divisional Forest Officer (DFO). The Divisions are further divided into ranges and beats for ensuring effective control and supervision of the forests of the State. These Divisions are also responsible for effective management of forest produce and recover and remit forest receipts from the end users.

## 1.3 Scope of audit

The performance audit was conducted during February to July 2012. Audit commenced with examination of the records in office of the Principal Secretary, E&F Department, GOA and thereafter the office of the PCCF, CCF (Territorial)<sup>2</sup> and seven<sup>3</sup> out of 21 territorial divisions were covered. Besides, offices of the CCF (Working Plan), Working Plan Officer (WPO) and Forest Utilisation Office (FUO) were also covered to examine various aspects of preparation of working plan (CCF and WPO) and sale of timber available in the forest depots under concerned forest Divisions - centrally (FU Division). The forest divisions were selected by applying statistical sampling technique (simple random sampling without replacement). Besides, audit findings in regular audit conducted during the course of the year have been suitably incorporated in this Report.

## 1.4 Audit Objectives

The performance audit was conducted with a view to ascertaining whether:

- working plans (WP) of the divisions were prepared and got approved from the GOI in time;
- steps were taken to optimise revenue resources by constantly reviewing the royalty rates and tapping all possible forest resources available for exploitation;
- system to collect royalty/forest receipts due to Government was effective;

<sup>2</sup> Being the controlling and monitoring authority of the functioning of the territorial forest divisions.

<sup>3</sup> Cachar, Dhemaji, Kamrup East, Karimganj, Lakhimpur, Nagaon and North Kamrup.

- prescribed rules, instructions and procedures with consequent revenue loss in the event of deviation thereto were complied with; and
- there existed an effective internal control mechanism to avoid leakage of revenue.

### 1.5 Acknowledgement

The Indian Audit and Accounts Department acknowledges the co-operation of the GOA and the E&F Department for providing necessary information and records for audit. An Entry Conference was held on 10 February 2012 wherein scope, objective and methodology of audit were explained to the GOA and E&F Department. The Deputy Secretary and the CCsF (Planning, Monitoring and Evaluation) represented the GOA and the E&F Department respectively in the aforesaid meeting. The draft performance audit report was sent to the Government/Department in September 2012. The audit findings and recommendations were discussed in an exit conference held in November 2012 which was attended by the Deputy Secretary, E&F Department; Secretary, Finance from the Government side and CCsF, Planning, Monitoring and Evaluation from the Department side. The replies furnished by the Government and the Department during the exit conference and at other points of time have been appropriately incorporated in the report.

### 1.6 Trend of forest receipts

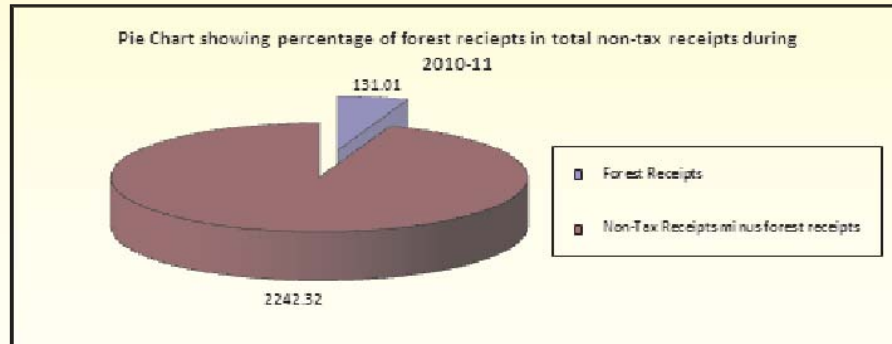
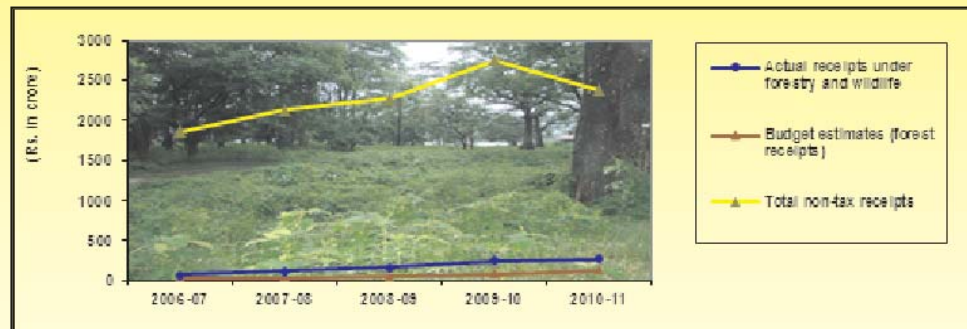
Position of budget estimates, actual forest receipts (which is a part of non-tax receipts) *vis-à-vis* the total non-tax receipts of the State during 2006-07 to 2010-11 are exhibited in the following Table 1 and graph/pie chart.

**Table 1**  
Analysis of forest receipts

(₹ in crore)

Year	Budget estimate	Actual forest receipts	Variation excess (+) shortfall (-)	Percentage of variation	Total non-tax receipts of the State	Percentage of col. 3 to col. 6
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2006-07	29.95	42.99	13.04	43.54	1,859.27	2.31
2007-08	37.50	75.03	37.53	100.08	2,134.59	3.51
2008-09	45.83	115.64	69.81	152.32	2,271.90	5.09
2009-10	85.90	160.56	74.66	86.92	2,752.95	5.83
2010-11	132.26	131.01	(-) 1.25	(-) 0.95	2,373.33	5.52

Source: Departmental figures and Finance Accounts.



As seen from columns 4 and 5 of Table 1, **there was mismatch between the actual receipts and budget estimates during all the years except 2010-11 and the percentage of variation ranged between 43.54 per cent during 2006-07 and 152.32 per cent during 2008-09.** The percentage of actual receipts when viewed against the total non-tax revenue of the State registered an increasing trend and rose from 2.31 per cent in 2006-07 to 5.83 per cent in 2009-10, came down slightly and stood at 5.52 per cent in 2010-11.



## AUDIT FINDINGS



## CHAPTER – II TIMBER





## CHAPTER II TIMBER

### 2.1 Working Plans

A Working Plan (WP) is a document prepared for a period of 10 years which contains management strategy/plans for silvicultural operations *i.e.* raising of new plantation and developing existing plantation and in the process generating revenue through sale of forest produce. Non-existence of a WP adversely affects silvicultural operations and has a detrimental impact on the growth and regeneration of the forests. It also leads to stoppage of all activities relating to extraction of forest produce from the forests affecting the receipts of the Department. The National Working Plan Code (NWPC) issued by the MoEF, GOI, in June 2004 has also highlighted the need for judicious use of natural resources.

Audit scrutiny of WP relating to silvicultural operations of timber revealed the following deficiencies.

#### 2.1.1 Non-revision of the WPs according to National Working Plan Code

The Supreme Court of India in the case of T N Godavarman Thirumulkpad *Vs* Union of India & Others has held (December 1996) that the felling of trees in all forests is to remain suspended except in accordance with the WPs of the State Governments, duly approved by the Central Government. The MoEF, GOI brought out (June 2004) the NWPC with the principles to strengthen the system of preparing of WPs in a uniform manner throughout the country and to re-shape the documents that embody forestry management prescriptions, *i.e.* the WPs. The NWPC contained the format in which the WPs were required to be prepared for obtaining approval of the MoEF, GOI which *inter-alia* included issues like survey and assessment of natural resources, markets and marketable products, methods of harvesting and their costs, past yield, revenue and expenditure, felling/cutting series of blocks and compartments, etc.

Audit scrutiny revealed that despite the apex Court orders in favour of felling in accordance with the WPs duly approved by the GOI and issue of NWPC prescribing detailed guidelines on preparation of WPs, the GOA did not opt

---



for the scope of commencement of silvicultural operations by re-designing the existing WPs in respect of four<sup>4</sup> out of seven selected Divisions or prepare fresh WPs in case of remaining three Divisions in which the WPs were not in currency. Non-preparation of WPs in line with the format given in the NWPC has resulted in multiple issues as discussed in succeeding paragraphs.

### 2.1.2 Non-continuation of silvicultural operations

The basic component of preparing a WP is to ensure that felling of matured trees and generation of new plantation go simultaneously thereby ensuring ecological balance, which is termed as 'silvicultural operations' in forests parlance. Non-preparation of WPs in accordance with the format as prescribed in NWPC not only hindered silvicultural operations, but deprived the State exchequer of much needed revenue as well. Since the WPs did not envisage any operation of 'felling series'<sup>5</sup>, revenue foregone on this account could not be quantified in Audit.

#### Good practices:

States having considerable forest cover like Maharashtra, Madhya Pradesh, Chattisgarh, West Bengal etc have continued harvesting timber through preparation of WPs duly approved by MoEF, GOI.

Besides, silvicultural operations following the WP prescriptions would have ensured continuous presence and movement of forest officials on the forest floor which could have ensured (i) protection to the forest produce, and (ii) availability of legal timber in the market – both of which could have prevented illegal felling of timber which has emerged as the major threat for the forests as well as the officials of E&F Department, GOA engaged in protecting such large spread of forest cover in the State.

Information obtained from the **seven selected divisions** revealed that during the period 2006-07 to 2010-11, more than 5,000 cum of timber was illegally felled by miscreants from reserved forests of these Divisions. The forest royalty involved in these illegally felled timber was ₹ 23.65 crore, while the minimum market value of the timber is manifold higher<sup>6</sup>. Of this, the E&F Department could recover about 3,700 cum timber while the remaining outturn valuing over ₹ 6.70 crore (royalty value) was removed by the miscreants, as shown in the following Table 2. Audit findings as regards the timber recovered by E&F Department have been discussed in succeeding paragraph 2.2.

<sup>4</sup> Kamrup East, Karimganj, Lakhimpur and Nagaon.

<sup>5</sup> Identifying the block/coupes from which trees are to be felled during the WP period.

<sup>6</sup> As seen from table 3 of this report.

Table 2

Table showing illegal felling of timber

Year	Illegally felled timber		Timber recovered		Timber removed by miscreants	
	Vol (in cum)	Amount involved (₹ in lakh)	Vol (in cum)	Amount involved (₹ in lakh)	Vol (in cum)	Amount involved (₹ in lakh)
2006-07	1,557.8800	629.14	1,186.28	473.27	371.60	155.87
2007-08	1,029.8572	484.88	918.92	429.96	110.94	54.92
2008-09	1,013.3119	523.14	606.48	303.41	406.83	219.73
2009-10	782.3940	421.03	529.26	280.31	243.83	134.77
2010-11	643.8570	307.26	451.52	202.86	192.34	104.40
<b>Total</b>	<b>5,027.3001</b>	<b>2,365.45</b>	<b>3,692.4547</b>	<b>1,689.81</b>	<b>1,325.54</b>	<b>669.69</b>

Source: Figures as furnished by the divisions.

The above figures reflect only the position of illegal felling and removal of timber which could be detected by the forest officials. In response to Audit observations on illegal felling of timber, the forest Divisions have been consistently reporting about their inability to cover the entire area of reserved forests under their jurisdiction with the available staff. Hence, the actual volume of illegal felling and removal of timber is evidently much higher. The “India State of Forest Report 2005”<sup>7</sup> brought out by Forest Survey of India, MoEF, GOI indicated that there was decrease of 90 sq Km of forest cover in 2004-05 as compared to 2002-03 and had identified ‘illegal felling’ as its main cause.

After this was pointed out, the Department stated (November 2012) that at present the Department has undertaken project/scheme to revise all working plans in the State out of grant provided under 13<sup>th</sup> Finance Commission Award. The North-East Space Application Centre, Shillong has been involved for growing stock estimation based on remote sensing and GIS data. The scheme is sanctioned but the fund is to be released by GOA within the financial year.

### Recommendation 1:

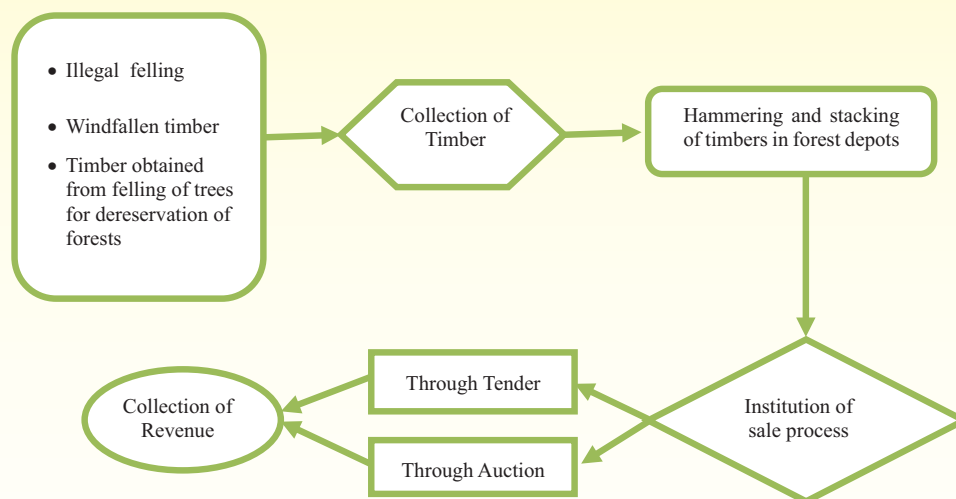
*GOA may consider lifting the ban on felling of timber imposed in 1985 and direct the E&F Department, GOA to immediately initiate steps to revise the existing WPs which are in currency/prepare the WPs wherever due, in accordance with the format of NWPC prescribed by MoEF, GOI for exploitation of available resources in the interest of (i) maintaining ecological balance through silvicultural operations, (ii) containing illegal felling and (iii) generation of much needed revenue for the State exchequer.*

*GOA may also ensure timely release of funds for revision of the WPs.*

<sup>7</sup> Available online at [www.fsi.org.in/sfr\\_2005.htm](http://www.fsi.org.in/sfr_2005.htm)

## 2.2 Disposal of illegally felled/windfallen timber/timber obtained from de-reservation of forest for various projects

The major sources of timber are (i) seized and confiscated timber which is illegally felled by miscreants, (ii) timber derived from windfallen trees and (iii) timber derived from felling of trees for de-reservation of forests for various non-forest activities, as shown in the following diagram.



E&F Department has constituted a division named ‘Forest Utilisation Office’ for dealing with the requests of various agencies/Government Departments for supply of timber available in the timber depots under the forest divisions centrally. Besides, the respective forest divisions are also empowered to sell the timber available in their respective forest depots.

Audit findings on the sale process through auction/tender system *vis-à-vis* collection of revenue and other issues are discussed in the succeeding paragraphs.

### 2.2.1 Deficiencies in the system of timber sale

As per Assam Sale of Forest Produce Coupes and *Mahals* (Amendment) Rules, 2000 (ASFPCM Rules), timber lying in the forest depots are to be sold through tender process and if the sale process doesn’t succeed despite three consecutive efforts, then timber could be disposed of through auction.

Audit scrutiny revealed that as per the system in place in the E&F Department, ‘base price’ is to be fixed at par with Government royalty rates according to the class of timber being put to sale.

An analysis of the Government royalty rates of various classes

of timber with the prevalent average market rates of the same was carried out by Audit. For this, Audit has independently collected the 'market rates' from the Directorate of Economics and Statistics, Assam. The analysis revealed that the market rates of timber were higher by 208.71 to 295.68 *per cent* in case of Teak timber, 317.86 to 512.79 *per cent* in case of Sal timber and 806.44 to 1,149.54 *per cent* in case of other timber as shown in the following Table 3.

**Table 3**  
Analysis of average market rates *vis-à-vis* the rates of royalty

Year	Average Market rate			Rates of Royalty			Percentage variation between the average market rates and rates of royalty		
	₹/cum			₹/cum					
	Teak	Sal	Others	Teak	Sal	Others	Teak	Sal	Others
2006-07	20,486	17,943	16,600	6,552	4,294	1,532	212.67	317.86	983.55
2007-08	23,735	23,876	17,342	6,552	4,294	1,532	262.26	456.03	1,031.98
2008-09	25,925	26,313	19,143	6,552	4,294	1,532	295.68	512.79	1,149.54
2009-10	30,340	29,775	20,839	9,828	6,396	2,299	208.71	365.53	806.44
2010-11	37,086	35,214	23,241	9,828	6,396	2,299	277.35	450.56	910.92

*Source: Directorate of Economics and Statistics, Assam and Departmental records.*

However, during regular inspection of DFO, Kamrup West Division (this Division was not selected for the performance audit) it was observed that the Division employed a methodology of fixing the 'base price' based on the average of last three sale value of auction of similar category of timber. As a result, the division could generate revenue over and above the rates of royalty leviable on similar categories of timber ranging from 207.16 to 254.62 *per cent* as shown in the following Table 4.

**Table 4**  
Collection of revenue over and above the rates of royalty

Year	Species	Volume (in cum)	Royalty value	Amount realised	Percentage of additional revenue
			(in ₹)		
2007-08	Sal	210.9280	8,99,397	31,74,740	252.99
2008-09	Sal	277.3310	11,82,539	41,93,563	254.62
2009-10	Sal	114.3700	7,31,511	22,46,893	207.16

It was noticed that the GOA has issued a notification adopting the above lines in September 2009 and directed the forest Divisions for fixing the 'base price' taking into consideration the average of last three sales values while selling timber lots on auction.

An analysis of the sale value of timber in seven selected Divisions during 2007-08 to 2010-11 with the market rates/average sale price of similar categories of timber in previous occasions is shown in the following Table 5.

Table 5

## Analysis of sale value of timber in seven Divisions

Year	Species of timber/ volume (in cum)	Value of timber at royalty rates	Value at which sold	Market Value	Average of previous sales	Difference between Market Value and Sale Value	Difference between Average sale price and Sale Value	Difference between market rate/average sale price
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2007-08	Teak/539.5002	11,69,434	34,36,660	1,28,05,037	23,80,176	93,68,377	(-10,56,484)	93,68,377
	Sal/218.1480	87,909	8,44,237	52,08,502	4,93,843	43,64,265	(-3,50,394)	43,64,265
	Others/3,950.8913	38,81,144	49,96,688	6,84,81,673	67,96,949	6,34,84,985	18,00,261	6,34,84,985
2008-09	Teak/351.6591	7,55,145	24,73,542	91,16,762	83,10,008	66,43,220	58,36,466	66,43,220
	Sal/66.7780	46,799	5,60,025	17,57,130	4,62,936	11,97,105	(-97,089)	11,97,105
	Others/4,168.3926	31,45,044	46,95,230	7,97,95,540	46,62,802	7,51,00,310	(-32,428)	7,51,00,310
2009-10	Teak/878.3756	35,54,074	55,01,230	2,66,49,916	1,00,08,224	2,11,48,686	45,06,994	2,11,48,686
	Sal/83.2090	71,069	5,83,182	24,77,548	8,43,554	18,94,366	2,60,372	18,94,366
	Others/3,894.0439	56,45,619	62,26,250	8,11,47,981	92,09,996	7,49,21,731	29,83,746	7,49,21,731
2010-11	Teak/195.7662	8,13,681	7,19,016	72,60,185	3,95,295	65,41,169	(-3,23,721)	(-3,23,721)
	Sal/202.2602	11,18,124	11,66,587	71,22,391	11,98,998	59,55,804	32,411	32,411
	Others/3,656.8603	36,77,360	32,82,799	8,49,89,091	28,08,450	8,17,06,292	(-4,74,349)	(-4,74,349)

Source: Departmental figures.

Thus, it may be seen that though the Divisions had fetched sale value which were higher than the royalty value (except some cases where timber was sold below the royalty value), yet these were far below the market rates/average of previous sale price relating to same category timber. Had these Divisions employed the methodology similar to the ones done by DFO, Kamrup West Division, there was likelihood of generation of additional revenue.

Further, in 695 out of 4,211 instances of sale of timber through tender/auction in the seven selected Divisions, it was noticed that 7,582.9686 cum timber involving other species were sold even below the royalty value of the timber. These timber lots were sold for ₹ 44.40 lakh instead of ₹ 106.63 lakh leading to loss of revenue of ₹ 62.23 lakh.

Besides, it was noticed that the formats of reports/returns furnished by the Divisions to the higher authorities do not contain provision for incorporating the 'base price' fixed for sale of timber lots. This deprives the higher authorities in the E&F Department to monitor the fixation of 'base price' as per the orders of GOA issued in 2009.

### Recommendation 2:

**GOA may issue instruction to the forest Divisions to follow the instruction of September 2009 scrupulously atleast for hardwood species like teak, sal etc., to ensure optimisation of revenue from sale of timber.**

*E&F Department may amend the format of report/return on sale of timber through tender/auction to enable incorporation of 'base price' fixed by the Divisions for better monitoring of the sale process of timber by higher authorities.*

### 2.2.2 Fixation of 'base price' for sale of timber

As mentioned in paragraph 2.2.1, the GOA issued notification in September 2009 for fixing the 'base price' taking into consideration the average of last three sales while selling timber lots on auction. This system was to ensure maximisation of revenue yield as it was based on the average of actual price at which similar category of timber was sold in past three consecutive occasions.

An analysis of royalty rates, average of last three sales (obtained from the records of selected Divisions) and market value (independently obtained by Audit) relating to teak, sal and other categories timber during 2006-07 to 2010-11 revealed the following.

**Table 6**  
Analysis of royalty rates, average of last three sales and market value

(in ₹/cum)

Year	TEAK			SAL			OTHERS		
	Royalty	Average sale price	Market Value	Royalty	Average sale price	Market Value	Royalty	Average sale price	Market Value
2006-07	4,309	-	20,486	4,158	-	17,943	1,643	-	16,600
2007-08	2,168	4,924	23,735	403	2,264	23,876	983	1,721	17,342
2008-09	2,147	23,631	25,925	701	6,932	26,313	754	1,119	19,143
2009-10	4,046	11,394	30,340	854	10,138	29,775	1,450	2,365	20,839
2010-11	4,156	2,019	37,086	5,528	5,928	35,214	1,006	768	23,241

Note: average sale price for 2006-07 is not filled up as the data was collected from 2006-07 onwards.



Thus, it may be seen from the graphs above that though the GOA order of September 2009 to sell timber by fixing the average of last three sales price as base price was envisaged to maximise revenue yield over and above the

royalty rates, in fact these remained close to the royalty rates and only on one occasion it had reached the level of ‘market rates’. Evidently, the system of selling timber at average prices did not yield the desired outcome of revenue optimisation. Further, as most of the Divisions and the E&F Department did not collect the ‘market rates’ of various categories of timber, they remained unaware about the wide gap between the ‘market rates’ and ‘actual price’ at which timber lots were being sold.

**Incidentally, the instant case of huge variation between the market price and rates of royalty which is extending undue benefits to the contractors dealing in forest produce has been identified and discussed<sup>8</sup> by the highest authorities in the GOA as a potential area of leakage of revenue.**

The Department, while accepting the audit observation, stated (November 2012) that fixing of floor price of market rate or average of three sales may be feasible for timber which belong to A or B class which have good market demand and do not deteriorate very fast.

### **Recommendation 3:**

*E&F Department may consider prescribing systems for (i) collecting the market rates from reliable sources by various Divisions and (ii) suitably benchmark these ‘market rates’ as an indicator while fixing base price for sale of timber.*

### **2.3 Functioning of Forest Utilisation Officer**

As discussed in paragraph 2.2, E&F Department, GOA has created the Forest Utilisation Officer (FUO) Division with the basic purpose of dealing with the requests of various agencies/Government Departments for supply of timber available in the timber depots under the forest divisions.

Audit scrutiny revealed that though the Division was mandated to deal with the requests of various agencies/Government Departments for supply of timber, centrally, there was no system of reports/returns to be furnished by the forest Divisions to the FUO regarding availability of timber in their forest depots. Consequently, FUO could not serve the purpose of functioning as the repository of information about State-wise availability of timber which could have enabled the FUO as well as the other controlling offices to effectively respond to the requests from various agencies for supply of timber though substantial volume of timber was available in the forest Divisions as may be seen from Table 2 under paragraph 2.1.2. Resultantly, there was loss of revenue/excess outgo of Government money, as discussed in the succeeding paragraphs.

<sup>8</sup> Principal Secretary (E&F, GOA)’s notes dated 22 December 2003 to the Chief Secretary and Minister (E&F), Assam.



### 2.3.1 Failure to supply timber requisitioned – loss of revenue

Border Road Task Force (BRTF) requested (September 2004) the FUI for supply of 3,006 nos. sal sawn timber of different sizes (totalling 130.89 cum). In the absence of a database of timber availability in various divisions, the FUI had to request all the divisions to intimate availability of timber. From the responses received, the FUI could supply 323 nos. sal sawn timber (between 2004 and 2008) through the DFO, Kamrup West Division.

As the FUI could not supply the remaining timber till 2008 (*i.e.* after expiry of more than four years from the date of receipt of indent), the BRTF authorities requested the former to refund the balance amount of ₹ 24.49 lakh deposited by them in favour of the E&F Department being the cost of the timber indented. The E&F Department accordingly refunded (September 2008) the amount, depriving GOA of revenue of ₹ 24.49 lakh. This was despite the fact that sufficient sal timber was available in various forest Divisions as evident from Table 5 under paragraph 2.2.1 which was disposed of during 2007-08 to 2010-11.

The Department stated (November 2012) that required timber could not be arranged as the private timber depots contacted for the purpose by the respective DFOs did not have the requisite sizes of timber/demanded additional amount for transportation of timber. The fact remains that no correspondence was found to have been made by the DFO with the BRTF authorities on the above lines till the latter requested for refund of the amount deposited.

### 2.3.2 Outgo of Government money

During 1985-86 when timber operation was in vogue in Assam, 2,450 cum timber was allotted<sup>9</sup> to three firms namely M/s Navaratna Udyog, Lekhapani; M/s Lekhapani Saw and Veneer Mills, Lekhapani and M/s Tinsukia Oil and Saw Mills, Tinsukia between August 1984 and July 1985. The firms deposited royalty and sales tax for 2,003.059 cum timber. Of this, the firms lifted 1,138.766 cum timber leaving the balance 864.293 cum involving ₹ 11.81 lakh and sales tax of ₹ 83,418 as ban was imposed (1985) by GOA on felling of timber.

Audit scrutiny revealed that GOA while addressing the issue of unlifted timber by various firms decided (August 1992) that if the earmarked timber is not available for giving to the concerned firms who have paid the value, the firms may be given timber equivalent to the money deposited by them. The order

<sup>9</sup> M/s Navaratna Udyog, Lekhapani – 450 cum vide Govt order No. FR. 22/85/32 dated 4 July 1985; M/s Lekhapani Saw and Veneer Mills – 1,000 cum vide Govt order No. FR. 22/85/32 dated 4 July 1985; and M/s Tinsukia Oil and Saw Mills – 1,000 cum vide Govt order No. FR. 72/83/Pt. III/65 dated 10 August 1984.



further stated that while calculating the timber equivalent to the money deposited by the firms, interest at 12 *per cent* up to date should also be added.

Scrutiny of records further revealed that despite the GOA order and requests made (November 1995) by the aforesaid firms for releasing timber, the E&F Department had not supplied the balance timber till 2010-11 (*i.e.* for more than 25 years). As a result, the firms approached the Gauhati High Court which ordered for payment of the balance amount alongwith interest. Accordingly, GOA had to pay ₹ 20.68 lakh<sup>10</sup> to M/s Navaratna Udyog in March 2011. Besides, payment of interest of ₹ 21.45 lakh calculated upto March 2011 in respect of the other two firms were also awaiting sanction from GOA.

Thus, had there been an updated database of timber available in various forest Divisions, the E&F Department could have used it as a tool to identify requisite timber for releasing to these firms. This could have enabled the GOA to avoid payment of Government money on account of interest and principal despite availability of substantial volume of timber in various forest divisions.

The Department stated (November 2012) that timber could not be released to the firms due to non-availability of suitable timber as per the requirement of the firms. The fact remains that this aspect has not been explored at all as evident from departmental files and records.

#### **Recommendation 4:**

*E&F Department may install a system of reporting regarding the volume and sizes of timber availability with the Divisions to the FUO for effective decision making and catering to the demands of various user agencies.*

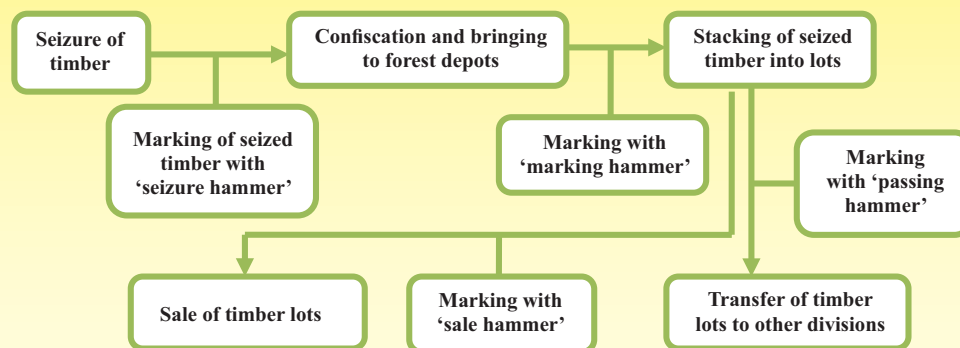
#### **2.4 Management of hammers**



In forest parlance, ‘hammers’<sup>11</sup> play an important role in case of marking of both, legal and illegal timber. Generally, hammers are classified into various categories namely ‘seizure hammer’, marking hammer’, ‘passing hammer’ and ‘sale hammer’. The functions of these hammers are discussed through the following block diagram.

<sup>10</sup> ₹ 4.39 lakh (value of timber) + ₹ 0.33 lakh (sales tax) + ₹ 15.96 lakh (interest).

<sup>11</sup> Hammers are used for marking of timber by the E&F Department.



Thus, it may be seen from the block diagram above, the hammers are of utmost importance and can be used for transporting illegally felled timber if these fall into the hands of miscreants. In view of such immense importance of use of hammers for marking timber, the Indian Forest Act (Section 51d) as well as the AFR {Regulation 48(1)(a)} has conferred the powers to the State Governments to make Rules guiding the principles for the same.

Audit scrutiny revealed that GOA is yet to frame any specific Rules regarding management of hammers. The position of hammers in the seven selected Divisions and F.U.O are mentioned in the following Table 7.

**Table 7**  
**Availability of hammers**

Name of Division	Hammers allocated	In use	Not in use	Not available/ lost
North Kamrup	112	19	93	-
Kamrup East	332	52	277	3
Dhemaji	28	28	-	-
F.U.O	20	2	13	5
Cachar	350	39	307	4
Nagaon	38	34	-	4
Karimganj	336	52	279	5
Lakhimpur	32	15	-	17
<b>Total</b>	<b>1,248</b>	<b>241</b>	<b>969</b>	<b>38</b>

Thus, out of 1,248 hammers available in these Divisions, only 241 were in use. More importantly, according to the information furnished to Audit, 38 hammers have since been missing/lost from these Divisions. The concerned Divisions broadly attributed the reasons for non-availability/loss of hammers to (i) reasons not known; (ii) lost in fire, (iii) transferred to other Divisions, etc. It was observed that there was a system of circulating the information about loss of hammers, yet the same was limited to the ranges/beats/check-gates under the concerned Divisions only. However, other Divisions remained unaware about such incidents. Further, though the position of hammers is watched through a control register in respective Divisions, yet there is no system for independent periodic physical verification of hammers. Also, there is no system of periodical reports/returns to be furnished by the Divisions to the higher authorities about the position of hammers. Due to

these deficiencies, the higher authorities remained unaware about non-utilisation of 969 hammers as well as non-availability/loss of 38 hammers in these Divisions which runs the risk of these being used by miscreants for transporting illegally felled timber.

The Department stated (November 2012) that CCsF of the territorial wings would be instructed to monitor the use of government hammers, ensure proper maintenance of records and also to inspect the records regularly.

#### **Recommendation 5:**

*GOA may frame specific Rules for guiding the management of hammers which may inter-alia include a system for circulating the information of missing hammers to all Divisions. A reporting mechanism on status of hammers in the Divisions may also be evolved so as to enable the higher authorities for better monitoring and guarding against loss/pilferage/misuse of hammers.*

*E&F Department may investigate the cases of non-availability/loss of hammers in its Divisions.*



**CHAPTER – III  
BAMBOO**





## CHAPTER III BAMBOO

**3.1** According to the WP prescriptions, bamboo is felled/exploited in four years rotation cycle. Each felling series becomes due for harvesting after every four years. If bamboo is not harvested from a felling series in a particular year, such felling series can be harvested only after four years, resulting in loss of revenue. Non-exploitation of bamboo crop prevents fresh growth of coppice shoots/clumps which eventually form the future crop. Besides, if not harvested in time, bamboo becomes clumsy and congestive, shows sign of deterioration and causes unwieldy growth of shoots.

Majority of bamboo harvested in the State for generating revenue is transported to the two paper mills of Hindustan Paper Corporation (HPC) located at Panchgram and Nagaon in the State. Apart from this, a small percentage of bamboo is used in handicrafts and other day to day use. Bamboo is harvested as per the WPs of respective Divisions. As per the present schedule of rates, royalty rate of bamboo is ₹ 2/bamboo.

### 3.2 Management of bamboo resources

Audit scrutiny revealed that in order to assess the total growing stock of bamboo in Assam, the E&F Department has carried out a detailed survey<sup>12</sup> between May-June 2010 and brought out the findings in a Report named “Assessment of total Growing Stock of Bamboo in Assam”. The Report *inter-alia* revealed that by putting all safe guards, a minimum 7.17 lakh MT bamboo can be harvested every year following a four year rotation cycle.

It was further noticed that the two units of HPC located in Assam need a total stock of 8 lakh MT bamboo as raw material per year for running at optimum capacity. Scrutiny of records revealed the following deficiencies in the management of bamboo resources.

---

<sup>12</sup> Survey carried out under the leadership of Dr R M Dubey, IFS, CCF, Research, Education and Working Plan, E&F Department, GOA.

### 3.3 Non-finalisation of Working Plans

As mentioned above, non-preparation and finalisation of WPs hamper exploitation of bamboo coupes thereby causing loss of revenue in addition to hampering the regeneration of new shoots. Preparation and approval of WP for subsequent period is therefore necessary prior to the expiry of the existing WP.

Audit scrutiny revealed that though the WPs in respect of three out of seven Divisions<sup>13</sup> had expired in 2009, the E&F Department is yet to finalise the WP and obtain approval of the MoEF, GOI. Consequently, the concerned Divisions were not in a position to allow extraction of bamboo during the working seasons 2009-10 to 2011-12. As per the existing

WP, the consolidated bamboo exploitable was calculated as 49,855 MT<sup>14</sup> (each MT consisting of 350 bamboo). Thus, non-initiation of timely action to prepare and finalise the WPs of these three Divisions has led to non-exploitation of available bamboo resources resulting in loss of potential revenue of ₹ 1.86 crore (calculated at the existing rate of ₹ 325/MT for three working seasons).

It was further noticed that there was no report/return prescribed for monitoring the currency of the WPs and status of preparation of WPs for subsequent periods to be furnished by the Divisions or the WP Divisions to higher authorities. Consequently, the higher management in the E&F Department remained unaware about non-renewal of WPs leading to loss to State exchequer. This was despite the fact that MoEF, GOI reminded the E&F Department in July 2007 to take expeditious steps to put in place the WPs so that extraction of bamboo can continue un-hindered.

The Department stated (November 2012) that due to delay in the release of funds for various works related to preparation of WPs, timely revision of WPs is badly affected in the State.

#### Recommendation 6:

*GOA may kindly ensure timely release of funds so as to enable the E&F Department to expedite the finalisation of the WP for immediate commencement of bamboo extraction.*

*E&F Department may put in place a mechanism for reports/returns to be furnished by the Divisions/ WP Divisions for monitoring the progress of renewal of WPs in time.*

<sup>13</sup> Cachar, Hailakandi and Karimganj.

<sup>14</sup> Cachar (21,880 MT); Hailakandi (9,325 MT) and Karimganj (18,650 MT).

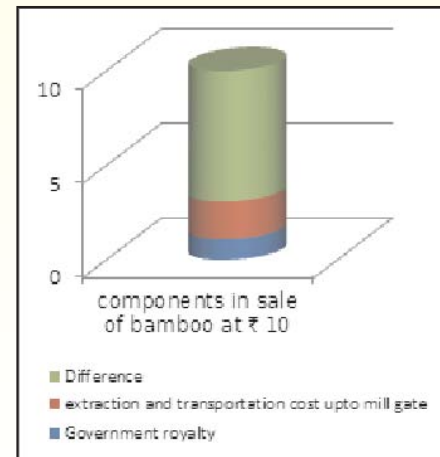


### 3.4 System of extraction of bamboo in the State

As discussed in the introductory paragraph under the segment named 'Bamboo', almost entire stock of bamboo extracted in the State are consumed by the two paper plants of HPC in the State. As per the system in place, contractors deputed by HPC operate the coupes earmarked in the WPs of respective Divisions and supply to HPC. Against each MT of bamboo (consisting of 350 bamboo) so supplied, the E&F Department gets a royalty of ₹ 118 upto March 2009 and ₹ 325 thereafter. Further, the Supreme Court has held<sup>15</sup> in 1998 that forest produce used by industries should be sold at 'market rates.'

An analysis of the market value, royalty and cost of extraction of bamboo revealed the following:

Item	Rate/bamboo
Market price/price at which procured by HPC	10
Extraction and transportation cost upto HPC mills	2
Royalty paid	0.39/1.08 <sup>16</sup>
Difference	7.61/6.92
Percentage of profit	76/69
Percentage of royalty GOA gets on each bamboo	4/10



Thus, while the market price/price at which HPC procures bamboo from Assam is about ₹ 10/bamboo, GOA gets only ₹ 1/bamboo and ₹ 2/bamboo is incurred on transportation cost upto HPC mill gate. Evidently, the Government which is the owner of the forest produce *i.e.* bamboo, gets the least of all the components whereas the contractors supplying bamboo to HPC are benefitted of substantial percentage of the sale value.

#### Methodology in neighbouring States

In Mizoram, bamboo coupes are sold through *mahals* wherein the royalty rate is benchmarked as the 'reserved price'. This methodology ensures that there is no loss to Government exchequer as the *mahals* are settled above the royalty rates.

Forest produce sold through tender system (*mahal* operation) had the tendency to generate much better revenue over and above the royalty rates as the forest

<sup>15</sup> Order dated 15 January 1998 in WP (C) No. 202/95.

<sup>16</sup> ₹ 0.39 upto March 2009 and ₹ 1.08 thereafter.

produce are being sold on competitive bidding, keeping the royalty rates as the base price. Taking the royalty value of bamboo *i.e.* ₹ 2/bamboo (effective from September 2009), the minimum price of bamboo per/MT works out to ₹ 700/MT (350 X ₹ 2/bamboo). Verification of records revealed that even the E&F Department has been following up a proposal (mooted in 2009-10) for enhancing the rate of royalty per MT of bamboo supplied to HPC to a similar amount. But the HPC authorities had been pleading the E&F Department not to increase the rates and maintain status-quo on the matter. However, the reasons as to why the HPC authorities wanted to stall the process of upward revision of Government royalty on supply of bamboo to HPC mooted by E&F Department, GOA could not be understood by Audit in view of the following:

- (i) the HPC authorities extract bamboo from forest areas in the State through contractors appointed by them and purchase the same at existing market rates while a meagre percentage of the total price is paid to GOA as royalty; and
- (ii) the HPC authorities regularly purchase bamboo originating from Mizoram, Manipur, Tripura, North Cachar Hills Autonomous District Council etc., at rates ranging between ₹ 1,565 and ₹ 2,323 per MT Green (each MT consisting about 150-200 bamboo); average price of bamboo working out to ₹ 1,892/MTG.

Thus, there was no reason why the GOA did not resist the contention of the HPC and went ahead with the proposal mooted in 2009-10 for revision of the rates of royalty for supply of bamboo to HPC. This would have enabled them to generate additional revenue.

Secondly, adoption of a methodology for sale of bamboo through tender system by the GOA similar to that in vogue for sale of minor forest produce like sand, stone etc., (till the temporary ban of Gauhati High Court in 2010-11) and also practiced in neighbouring State like Mizoram would have ensured that the GOA gets the best price or atleast the royalty value through sale of bamboo resources. That would have ensured that the verdict of apex court for supply of forest produce at market rates is being followed in letter and spirit and also reduced the involvement of HPC authorities in the matter relating to fixation of royalty rates of forest produce, which is otherwise a State subject.

The Department stated (November 2012) that revision of the system of supply of bamboo to HPC through sale of departmental coupes as suggested by Audit requires negotiation with HPC and mutual agreement to new terms and conditions. As stated above, why the E&F Department needs to take the HPC on board for revising the mode of sale of bamboo resources is not understood.

#### **Recommendation 7:**

***GOA may revisit its decision to allow supply of bamboo to HPC through contractors appointed by the latter. They may instead consider selling the bamboo coupes through tender for optimising revenue yield from bamboo resources.***



### 3.5 Non-revision of WP of quota allotted to Ashoka Paper Mills

The WP in respect of bamboo bearing areas earmarked by E&F Department for supply of bamboo to M/s Ashoka Paper Mills (non-functional since 1998) expired in 2004. As per the agreement between the GOA and M/s Ashoka Paper Mills (executed in October 1974), the annual quota of bamboo was 60,000 MT.

Audit scrutiny revealed that the aforesaid Mill was non-functional since 1998 and the bamboo lease as well as the WP was valid till 2004. But, the WP was not renewed by the E&F Department till the period of this performance audit. This was despite the fact that the two Mills of HPC operating in the State have been running on shortage of raw material and has been repeatedly requesting the

E&F Department to take necessary steps to renew the above WP and allot the quota to the Mills of HPC.

Had the E&F Department initiated timely action to renew the WP after expiry of erstwhile bamboo lease of M/s Ashoka Paper Mill in September 2004, the aforesaid quota of at least 60,000 MT per annum could have been allotted for the Mills of HPC which would have enabled generation of additional revenue of ₹ 7.38 crore<sup>17</sup>.

The Department stated (November 2012) that revision of WPs would be undertaken after proper inventory survey in the divisions due for revision. The reply however, remained silent as to why the WP could not be revised for more than eight years which led to the loss of revenue.

### 3.6 Supply of bamboo at 'Air dried' instead of 'Green' method

Audit scrutiny revealed that as per the system of procurement of bamboo in place, the Mills of HPC purchase bamboo originating from the States like Mizoram, Manipur, Tripura and even North Cachar Hills Autonomous District Council (falling in Assam) on MT 'Green' (MTG) basis<sup>18</sup>. Each MTG consists of 150-200 bamboo. However, in case of bamboo procured through HPC appointed contractors from bamboo bearing areas located in Assam (other than district council area) the same is purchased at MT 'air dried' (MTAD) method<sup>19</sup>. Each MTAD consists of 300-400 bamboo. However, payment for bamboo procured by HPC authorities is made on per MT basis.

<sup>17</sup> 60,000 X 5 years (2004-05 to 2008-09) = 3,00,000 MT X ₹ 118 (royalty rate upto 2009) and 60,000 X 3 (2009-10 to 2011-12) = 1,80,000 MT X ₹ 325 (royalty rate from April 2009).

<sup>18</sup> Methodology in which 'green' bamboo are sold which has more pulp content.

<sup>19</sup> Methodology in which dry bamboo is sold with less weight.

Thus, it can be seen from the above that while the HPC authorities are purchasing bamboo from other sources at MTG basis and paying prices per MT consisting 150-200 bamboo, Assam bamboo is procured at MTAD basis where payment is made as per MT consisting 300-400 bamboo. Consequently, while making payment for each MT of bamboo, the HPC authorities are actually receiving double the number of bamboo due to adoption of MTAD method in procurement in case of bamboo originating from Assam.

Audit scrutiny further revealed that though there was a series of discussion between the HPC authorities and the E&F Department about a number of issues, this matter was never discussed. An effort by Audit to independently collect the reasons for such difference in approach from HPC authorities failed as the latter did not respond to the request of Audit.

As per information collected from four Divisions<sup>20</sup>, 97,819 MTG bamboo was extracted<sup>21</sup> from these divisions by HPC appointed contractors during 2006-07 to 2010-11 but royalty was paid by the HPC authorities to GOA on MTAD basis (i.e. ₹ 118/MTAD during 2006-07 to 2008-09 and ₹ 325/MTAD during 2009-10 and 2010-11 totalling to ₹ 1.18 crore). Thus, the HPC authorities while purchasing 97,819 MT bamboo at AD method, got 3.42 crore<sup>22</sup> bamboo. Had the system been similar with other sources i.e. purchase on 'MTG' basis, 3.42 crore bamboo would have made 1,95,429 MTG<sup>23</sup> leading to recovery of revenue of ₹ 2.36 crore. This resulted in loss of revenue of ₹ 1.18 crore.

Further verification revealed that for supply of 97,819 MT bamboo to HPC Mills, ₹ 1.18 crore was realisable at the rate of ₹ 118 and ₹ 325 per MTAD. Against this, the concerned Divisions reported realisation of ₹ 69.54 lakh only resulting in further short realisation of ₹ 48.46 lakh.

#### **Recommendation 8:**

***GOA may initiate immediate steps to ensure that the system of procurement of bamboo on MTG basis applicable for bamboo of other States/autonomous bodies is applied in case of bamboo procured from Assam as well.***

The Department stated (November 2012) that the suggestion of Audit needs to be discussed with HPC management to arrive at an agreeable solution.

<sup>20</sup> Cachar, Hailakandi, Karimganj and Nagaon.

<sup>21</sup> 96,600 MTG during 2006-07 to 2008-09 (when royalty was ₹ 118/MTAD) and 1,219 MTG during 2009-10 and 2010-11 (when royalty was ₹ 325/MTAD).

<sup>22</sup> Taking the average of 350 bamboo per MT (each MTAD consists 300-400 bamboo).

<sup>23</sup> Taking the average of 175 bamboo per MT (each MTG consists 150-200 bamboo).

### 3.7 Non-supply of additional quota to HPC

Audit scrutiny of the information furnished by HPC authorities to the E&F Department revealed that the two paper manufacturing plants of HPC operating in Assam had an installed capacity of 2.5 lakh MT of bamboo each *i.e.* 5 lakh MT bamboo/annum which had been enhanced to 8 lakh MT/annum. It was also noticed that despite best efforts both the plants of HPC had not been able to obtain raw material for more than 60 *per cent* of the capacity of the mills.

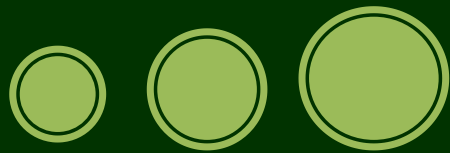
This when compared to the assessment of total bamboo stock availability as discussed in paragraph 3.2 (*i.e.* 7.17 lakh MT bamboo/year) would reveal that the E&F Department could have managed its bamboo resources in a more efficient manner to augment the supply of bamboo to HPC Mills which are adversely affected due to non-availability of raw material. The huge revenue potential remaining to be tapped is about ₹ 50.19 crore<sup>24</sup>/annum considering the royalty value *i.e.* ₹ 2/bamboo only which would further increase if bamboo is sold through *mahal* operation.

The Department stated (November 2012) that the quantity that can be silviculturally harvested would be assessed after revision of the WPs. The reply remained silent as to why effective steps could not be taken by the E&F Department to process the relevant WPs timely in view of the extractable quantity of bamboo worked out in the Report on 'Assessment of total growing stock of bamboo in Assam'. That would have enabled them to allot more quota to the HPC mills located in the State and generated additional resources.

#### Recommendation 9:

*E&F Department may take immediate steps for optimising the supply of bamboo to the HPC Mills keeping in view the assessment of extractable bamboo already carried out in 2010.*

<sup>24</sup> 7,17,000 MT X 350 bamboo/MT X ₹ 2/bamboo.



**CHAPTER – IV  
MINOR FOREST  
PRODUCE**



## CHAPTER IV MINOR FOREST PRODUCE

Apart from timber and bamboo, the other minor forest produce generating forest revenues are sand, stone, boulders, *agaru*, honey, *elaichi* etc. Of these, sand, stone and boulders are the items generating major revenue for GOA. Further, sand, stone and boulders are sold through tender as well as permit system. Sale of minor forest produce in Assam is regulated as per AMMCR, 1994 and administered by the E&F Department, GOA.

Audit scrutiny of sale of minor forest produce (sand, stone and boulders) revealed the following issues.

### 4.1 Fixation of royalty rates

The E&F Department, GOA has revised (April 2005) the rates of royalty applicable on sand, stone, boulder as below:

Item	Existing rate	Revised rate
	( in ₹/cum)	
Sand	50	70
Stone/boulders/gravel	70	100
Shingle	60	75
Clay and earth	8	15

Audit scrutiny revealed that the E&F Department has, while proposing the revision in royalty rates, carried out (2003) a detailed study<sup>25</sup> of the National Price Index, the then market prices. It was found that the market price of one truck load (five cum) of sand was ₹ 1,800 to ₹ 2,200 in retail. Keeping all the aspects of expenditure to be incurred by common people/contractors like cost of collection, loading/unloading, transportation and all other unforeseen expenditure alongwith the reasonable profit margin allowed, the rate of royalty was proposed to be fixed as ₹ 350 per truck (*i.e.* ₹ 70 per cum). Similar study was carried out for other items as well and revised rate of royalty was worked out at 17.5 *per cent* of the prevalent market rates of these items. **The study report further stated that such fixation would have no adverse impact on the interest of common people and developmental activities as there would be no impact on the prices of these commodities.**

<sup>25</sup> Study conducted by Shri V K Vishnoi, *IFS*, then Chief Conservator of Forests (Territorial) who is the present Principal Chief Conservator of Forests of Assam.

It was, however, noticed that the GOA instead of notifying the above methodology of the study as a 'model' for working out the royalty rates on a scientific manner after detailed analysis of market rates and other relevant inputs at periodic interval, only notified (April 2005) the rates worked out by the E&F Department, that too after a lapse of about two years. Consequently, the variation in the market rates during the intervening two years *i.e.* the date of study (2003) and the issue of notification (2005) were not taken into consideration, thus fixing the royalty at lesser rates.

Further, the GOA ordered (through another notification dated 30 September 2005 and June 2007) that rates of royalty so fixed in April 2005 would be revised at the rate of 15 *per cent* after every two years. Analysis of the GOA's decision to revise the rates of royalty of minor forest produces at 15 *per cent* every two years keeping in view the results of study carried out by the E&F Department as discussed above revealed the following as shown in Table 8. For this, market rates of minor forest produce have been independently collected by Audit from the Directorate of Economics and Statistics, Assam.

**Table 8**  
**Analysis of market rate and rates of royalty**

Year	Name of forest produce	Royalty rate (in ₹)	Market rate/cum of particular forest produce during the year (average <sup>26</sup> )	17.5 <i>per cent</i> of market rate	Difference/cum
(1)	(2)	(3)	(4)	(5)	(6)
2006-07	Sand	70	353	62	(-) 8
	Stone, boulder	100	714	125	25
2007-08	Sand	70	439	77	7
	Stone, boulder	100	947	166	66
2008-09	Sand	70	456	80	10
	Stone, boulder	100	1,125	197	97
2009-10	Sand	70/90	501	88	18/--
	Stone, boulder	100/130	1,255	220	120/90
2010-11	Sand	90	629	110	20
	Stone, boulder	130	1,447	253	123

*Note: Rate of royalty revised in September 2009.*

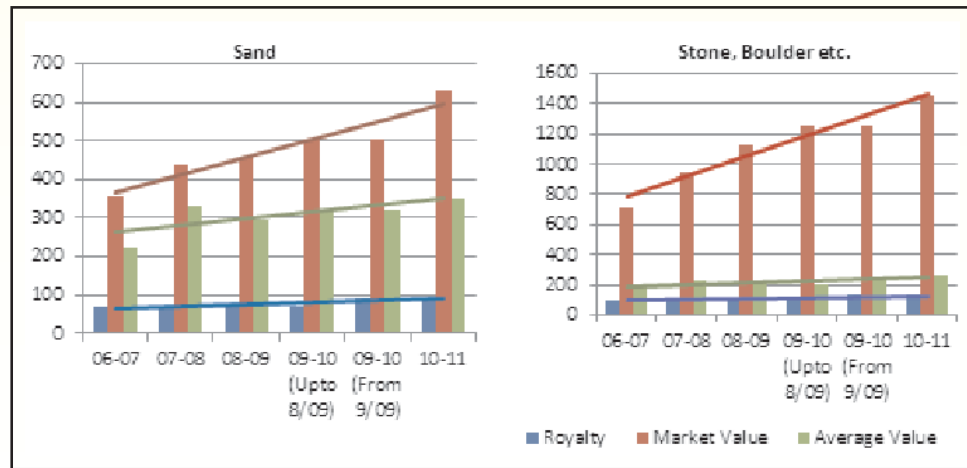
Audit scrutiny further revealed that pursuant to the provisions of the AMMCR, 1994, the GOA has ordered (September 2000) that permits for extraction of forest produce to be issued on payment of a price at the nearest *mahal* rate. An analysis of the rates of royalty, average price based on nearest *mahal* rates and market rates of minor forest produce revealed the following as shown in Table 9 and graphs thereunder.

<sup>26</sup> As worked by the Directorate of Economics and Statistics, Assam. The minimum market rate applicable to various types of same forest produce has been considered.

**Table 9**  
Royalty, average value (nearest *mahal* rates) and market value of sand, stone boulders etc

Year	Item	Royalty	Market Value	Average Value	Percentage of royalty vis-à-vis Market Value	Percentage of royalty vis-à-vis Average Value
2006-07	Sand	70	353	224	5	3
	Stone, Boulder etc.	100	714	183	7	2
2007-08	Sand	70	439	328	6	5
	Stone, Boulder etc.	100	947	230	9	2
2008-09	Sand	70	456	293	7	4
	Stone, Boulder etc.	100	1,125	209	11	2
2009-10 (Upto 8/09)	Sand	70	501	321	7	5
	Stone, Boulder etc.	100	1,255	206	13	2
2009-10 (From 9/09)	Sand	90	501	321	6	4
	Stone, Boulder etc.	130	1,255	249	10	2
2010-11	Sand	90	629	348	7	4
	Stone, Boulder etc.	130	1,447	267	11	2

Graphs showing growth of market rates, average value (nearest *mahal* rates) and rates of royalty in respect of sand, stone and boulders during 2006-07 to 2010-11



Thus, the market value of the forest produce registered an increasing trend during the above five-year period. Though the average value of forest produce calculated at nearest *mahal* rates were higher than the royalty rates prevailing from time to time, yet these remained close to the rates of royalty (in case of stone, boulders etc)/much lower than 17.5 per cent of the market rates (in case of sand as well as stone, boulders etc). Had the GOA ordered for implementing the methodology as recommended by the study conducted by the E&F Department, the rates of royalty could have been fixed on more scientific basis and aligned with the market rates which would have benefitted the State exchequer and also ensured that there is no undue benefit to the contractors dealing in forest produce. Considering the minor forest produce extracted from seven selected Divisions during 2006-07 to 2010-11 and applying the differential rates



(between 17.5 *per cent* of the prevalent market rates and the royalty rates), the GOA was deprived of generating additional revenue of ₹ 76.13 crore and simultaneously the contractors dealing in forest produce were extended undue benefits to that extent.

Further, the *mahal* operation has been temporarily suspended since 2010-11 in view of the orders of Hon'ble High Court of Gauhati. In the absence of *mahal* operations, there is no benchmark to work out the rate of royalty to be levied while issuing permits by the forest Divisions, if the orders of the GOA (September 2000) for levying royalty at nearest *mahal* rates is to be continued, post 2011-12.

The Department stated (November 2012) that stone and sand are basic raw materials which are used in public works and also by a wide section of the people for construction purposes. Revision of royalty rates will have a cascading effect on the cost of various projects of the State and Central Government and thus, a balanced view needs to be taken considering other conflicting interests of the State. The reply is not convincing as the formula worked out by the then CCF (T) has clearly stated that royalty can be fixed as 17.5 *per cent* of the market value keeping all aspects in mind and it was emphatically stated that such fixation would have no adverse impact on the interest of common people. Further, the undue benefit extended to the contractors and consequent loss to the Government because of wide variation between the royalty rates and the prevalent market value has already been identified by the GOA *{notes of the Principal Secretary (E&F) discussed in the table under paragraph 4.4 refers}*.

#### Recommendation 10:

*GOA may consider revisiting the orders for revising the rates of royalty by 15 per cent every two years and also the orders for application of nearest mahal rates while issuing permits. They may instead consider implementing the methodology for fixation of royalty at periodical interval calculated on prescribed percentage of the market rates.*

#### 4.2 Non-revision of rates of royalty on minor forest produce

As mentioned in paragraph 4.1, the GOA, while revising the rates of royalty on minor forest produce in April 2005, has ordered (September 2005) for revision of rates of royalty after every two years.

Audit scrutiny revealed that despite the stipulation of the GOA, the E&F Department did not revise the rates of royalty on minor forest produce which fell due in September 2007. It was further noticed that while giving effect to the notification of GOA of 2005 on 15 *per cent* revision every

two years, the E&F Department revised (**September 2009**) the rates of royalty on minor forest produce by enhancing the existing rates fixed in April 2005 by 30 *per cent* (*i.e.* 15 *per cent* due in 2007 and 2009). Thus, though the revision so made in September 2009 brought the rates of royalty in compliance of the



GOA orders of 2005, yet non-revision of the rates in 2007 by 15 per cent over the rates fixed in 2005 has resulted in loss of revenue of ₹ 9.31 crore in respect of only seven selected Divisions.

The Department stated (November 2012) that the AMMCR are under consideration for review by GOA. The reply did not touch upon the issue raised by Audit as to why the E&F Department did not revise the rates of royalty by 15 per cent in 2007 though the same was ordered by the GOA in 2005.

### 4.3 Non-application of nearest *mahal* rate while issuing permits

In pursuance of the provisions of the AMMCR, 1994, the GOA in its order of September 2000 delegated the authority for granting permits to the CsF concerned to be issued for a period of one year and on payment of a price at the nearest *mahal* rate.

Audit scrutiny revealed that though the orders of the GOA (September 2000) changed the erstwhile system of granting permits (to be issued on realisation of simple royalty), neither the GOA nor the E&F Department installed a system of monitoring the compliance of the above orders

by the concerned CsF and the Divisions. It was noticed in seven selected Divisions that while issuing permits for extraction of sand, boulder, stone etc. of 80.44 lakh cum during 2006-07 to 2010-11, the Divisions applied the rates of royalty instead of the nearest *mahal* rates leading to short application of rates. This resulted in loss of revenue of ₹ 84.57 crore.

Audit scrutiny also revealed that none of the Divisions have instituted a system of notifying the rates (of nearest *mahal*) applicable for the respective areas from where permits for extraction of minor forest produce are issued. This would have enabled the Divisions to use these rates as ready reckoner while issuing permits.

The Department stated (November 2012) that the CsF who are empowered to grant permits for collection of stone, sand etc. grant permits to applicant after due verification. It was further stated that the nearest average *mahal* rate is charged for grant of permit taking into account the quality of the materials and the distance from the market. The argument of the Department that permits were being issued after due verification of various factors is not consonant with the order of GOA. Further, no such orders of the CsF was found on records during test check in the concerned Divisions neither were these submitted alongwith the replies of the Department. This clearly indicates that the reply furnished by them is an afterthought not supported by facts.

#### Recommendation 11:

*E&F Department may issue instruction to the Divisions for strict compliance of the orders dated September 2000. They may also instruct the concerned Divisions to install a system of notifying the applicable rate (at nearest mahal rates) from time to time for using these rates as ready reckoner while issuing permits.*

#### 4.4 Extraction of minor forest produce by National Highway Authority of India

Audit scrutiny of the files on allotment of sand, stone, boulders to the contractors of National Highway Authority of India (NHAI) maintained<sup>27</sup> in the GOA indicated that the then Chief Conservator of Forests (Territorial) {CCF (T)} on behalf of the E&F Department submitted a proposal to GOA for enlistment of NHAI in the royalty schedule (which would mean that the contractors working for NHAI would be allotted sand, stone, boulders etc. at royalty rates). It was also mentioned therein that inclusion of NHAI in the royalty schedule would have no financial implication to the State exchequer.

Audit scrutiny of the above file revealed the following sequence of events:

Date	Events on allotment of sand, stone, boulders to the NHAI contractors
22-12-2003	The <b>Principal Secretary (PS), E&amp;F in the GOA</b> in his note to the Chief Secretary (CS) wrote that “On first reaction, I find the proposal for including any department in the schedule (for allowing extraction of produce at simple royalty rates) is not in the interest of our revenue..... CS is aware that such materials are sold in market at a rate much higher than the royalty rates charged by us on permit. Such double pricing is naturally prone to misuse. Secondly, <b><i>we are not sure that the estimates sanctioned for Central Government Departments are based on market rates or royalty rates.</i></b> If the estimates are based on market rates and we allow contractors to get permits, the <b><i>benefit of difference in price would go to them and State would miss the revenue.</i></b>  <b><i>I suggest that unless the Central Government Departments inform us the rates relied upon by them in their estimates along with the quantity required for the project as per estimates we should not issue permits. We may issue them permits on the rates taken by them into account in their estimates instead of royalty rate, if the two are not same”.</i></b>
-do-	On the basis of above note, the <b>CS</b> wrote in his note that “Minister (E&F) may like to approve the proposal of PS”.
24-12-2003	In response the <b>Minister (E&amp;F)</b> stated that “I broadly agree with the view of PS...however, cross checking the rates etc. should not delay issuance of permits as it would hamper some important public projects being implemented”
21-5-2005	The <b>Secretary (E&amp;F)</b> wrote “I have attended the last State Level Coordination Committee on implementation of road project by NHAI...The meeting in a resolution requested the Forest Department to enlist NHAI in the forest royalty schedule.....”
26-5-2005	The <b>Commissioner &amp; Secretary (E&amp;F)</b> responded stating that “I remember the subject being processed earlier....what is the outcome?”
30-5-2005	On the basis of a note from the E&F Department, the <b>Secretary (E&amp;F)</b> wrote that “it is stated by the Department though the matter was processed, no notification or order was issued in this regard. As such, we may take action on the present request. Additional CS II is also repeatedly pursuing the matter...”
6-6-2005	While endorsing the above note to the Minister (E&F) the <b>Commissioner and Secretary (E&amp;F)</b> wrote “Government may notify NHAI as one of the scheduled beneficiaries”.
17-6-2005	The <b>Minister</b> directed the Commissioner and Secretary (E&F) that “please ascertain if their (NHAI) road estimates reflect market rates .....”

<sup>27</sup> Page No.1-3 of file No. FRM-232/2003.

14-7-2005	The <b>CCF(T)</b> , E&F Department issues a letter to the NHAI asking the latter “to intimate whether your estimates for four laning of National Highway works in different segments have been prepared taking market price of boulder, stone, sand and earth. Please mention per cum rates of these materials on the basis of which the NHAI has prepared the estimates and also send copies of the same on the basis of which the tenders have been invited for all the segments of National Highways....”
21-7-2005	The file is again moved. The initial note mentioned “no reply to our letter has been received (from NHAI).....submitted <i>as desired</i> .....”  The <b>Joint Secretary (E&amp;F)</b> endorsed the note to Commissioner and Secretary (E&F) stating “The reply of the report called from CCF (T) is still awaited”
-do-	The <b>Commissioner and Secretary (E&amp;F)</b> wrote “CCF (T) was requested to examine the royalty rates incorporated in the estimates...The report is still awaited. The report is essential to enable Government to come to a decision in this regard. Minister may also kindly recall that a Committee was formed under the Chairmanship of CCF (T) to determine rates of royalty which could be implemented throughout the State and which would be uniform and at par (reasonably) with prevailing market rates. The recommendation of the Committee is also awaited. In the above circumstances, we may allow at permit system and <i>on existing prescribed rates provided NHAI gives an undertaking that they are agreeable to pay whatever royalty assessed by the Government in due course, prospectively</i> ”.
22-8-2005	The <b>Minister (E&amp;F)</b> returned the file stating that “ <i>NHAI have already submitted details. Pl put up with details for enabling us to give permission</i> ”.
29-8-2005	The Secretary (E&F) while re-submitting the file to <b>Minister (E&amp;F)</b> wrote “.... <b>As discussed</b> , the file is submitted. We may indicate our approval against the quarry <sup>28</sup> listed by the authority”
23-11-2005	The <b>Minister (E&amp;F)</b> while disposing of the file submitted on 29-8-2005 mentioned “Project Director, NHAI has forwarded applications of .....for issue of permits for stone, sand, GSB material etc. <i>on payment of simple royalty and VAT</i> . The CCF (T) has forwarded their applications..... <i>His proposal is approved.....</i> ”

Keeping the above decision as precedence, all subsequent requests of NHAI were dealt with and extraction of forest produce allowed on payment of **simple royalty**.

In the above perspective the following audit observations emerge:

- In response to the letter of CCF (T) the NHAI responded on 18-8-2005 (the letter referred to by the Minister in his note dated 22-8-2005) wherein the NHAI stated that “it is to mention here that except a few packages..... almost all the stretches have been awarded to the civil contractor as per the list enclosed herewith. So, you are hereby requested to issue permit to our contractor as per the requirement on phased manner to enable them to extract the materials urgently” (***Copy of the letter enclosed as Annexure ‘A’***). From the above letter it is seen that the NHAI had allotted civil works contracts in respect of 28 chainages in which the ***rates of forest produce at source were fixed at an average of ₹ 520/cum (stone/boulders) and ₹ 275/cum (sand)***. Scrutiny of the above rates

<sup>28</sup> Quarry is pre-defined area wherefrom the forest produce are allowed to be extracted.

revealed that these rates are higher by ₹ 420/390 per cum in respect of stone/boulders and by ₹ 205/185 per cum in respect of sand when compared to the royalty rates *i.e.* ₹ 100/130 per cum<sup>29</sup> of stone, boulders and ₹ 70/90 per cum<sup>30</sup> of sand.

It is evident that had the file been submitted as sought by the Minister in his note dated 22 August 2005 with due analysis of the relevant inputs available in the letter of NHAI dated 18 August 2005, the variation between the rates of royalty and rates at which work orders have been issued by NHAI as discussed in the preceding paragraph could have been brought to his notice. This would have enabled the Minister to take appropriate decision on the matter. Instead, the file was re-submitted to the Minister with the proposal for allowing the contractors of NHAI to get the benefit of royalty rates on extraction of forest produce. This was despite the fact that the rates at which work orders have been issued by the NHAI were available on file.

- Secondly, in the initial notes (December 2003) it was decided that *permits would be issued to the contractors of NHAI on realisation of the rates taken by them in their estimates instead of royalty rate, if the two are not same which was approved by the Minister (E&F).*
- Thirdly, the Commissioner and Secretary (E&F) proposed (July 2005) for *obtaining undertaking from the NHAI that they would pay the balance royalty* if Government decided higher rates of royalty prospectively.

It is evident from the above that the contractors of NHAI were allowed extraction of sand, stone, boulders etc. at ‘**simple royalty**’ bypassing and overlooking (i) clear notings at various levels against the same, (ii) the proposal of Commissioner and Secretary (E&F) to obtain undertaking from NHAI about payment of balance royalty if higher rates are determined at later date and most importantly (iii) the facts disclosed in the letter of NHAI which clearly mentioned allotment of works to contractors allowing price of sand, stone, boulders at much higher rates than the royalty rates. Further, in view of the above Government decision, it was noticed in four test checked Divisions<sup>31</sup> that they had already allowed extraction of 3.31 lakh cum sand and 20.84 lakh cum stone between 2006-07 and 2010-11 through issue of permits on recovery of simple Government royalty as applicable.

**Irregular and unjust decision of the Government on extraction of sand, stone, boulders on payment of royalty ignoring the facts as highlighted above would not only cause loss of revenue to the tune of ₹ 844.94 crore to the Government exchequer, it would also extend undue gain to the private parties (contractors) of the same amount as shown in the following table.**

<sup>29</sup> ₹ 100/cum upto 31 August 2009 and ₹ 130/cum thereafter.

<sup>30</sup> ₹ 70/cum upto 31 August 2009 and ₹ 90/cum thereafter.

<sup>31</sup> Cachar, Kamrup East, Nagaon and North Kamrup.

Item	Requirement <sup>32</sup> of forest produce as reported by NHAI (in lakh cum)	Average rate of forest produce at source at which work order issued (in ₹)	Rate of simple royalty (in ₹)	Difference (in ₹)	Loss of revenue/ undue gain to contractors <sup>33</sup> (₹ in lakh)
Stone/ boulder	171.21	520	100/130	420/390	69,340.05
Sand	77.71	275	70/90	205/185	15,153.45
<b>Total</b>					<b>84,493.50</b>

### Recommendation 12:

*The GOA may investigate the matter as to how the NHAI contractors were allowed extraction of sand, stone, boulders etc. at ‘simple royalty’ despite the availability of the details of the rates at which work orders were issued by the NHAI to its contractors.*

*Secondly, GOA may explore the possibility of recovering the differential royalty from the contractors of NHAI in the interest of State revenue.*

*Thirdly, GOA may issue necessary orders to the forest Divisions for collecting royalty at par with those at which NHAI has issued work orders to the contractors to arrest further loss of Governments revenue.*

#### 4.5 Loss of working period of sand, stone and boulder mahals

Accumulation and depletion of sand/ stone in the riverine *mahal* due to river current is a constant process and failure to extract these within the stipulated timeframe results in washing away of these materials, thus leading to loss of revenue. Further, forest produce in the riverine *mahals* are put up for sale every alternative year for a cycle of two years.

Audit scrutiny revealed that the E&F Department has neither prescribed specific timelines for guiding various processes involved in settlement of *mahals* nor put in place a mechanism for monitoring the same. Resultantly, the higher authorities in the E&F Department remained unaware of delayed settlement of *mahals/ mahals* remaining unsettled for considerable period of time which deprived the State exchequer of revenue. Also, there were cases of *mahals* pending in the Court of law and in absence of monitoring mechanism, the E&F Department could not take suitable steps to approach the concerned Court for vacating the stay orders.

<sup>32</sup> Requirement in respect of the stretches where work order has been issued, as reported by the NHAI.

<sup>33</sup> Calculated at average of difference as ₹ 405 for stone/boulders {(₹420 + ₹ 390)/2} and ₹ 195 for sand {(₹ 205 + ₹ 185) /2}.

An analysis of the settlement process in the seven selected Divisions revealed that in three out of seven Divisions<sup>34</sup> there were delays ranging between 1-39 months in settlement of 43 *mahals*. For *mahals* remaining inoperative in the above cases in three Divisions there was loss of ₹ 2.21 crore to the State exchequer.

**Recommendation 13:**

*E&F Department may install (i) a control mechanism for monitoring the settlement/re-settlement of mahals so as to arrest cases of delay in settlement of mahals; (ii) a mechanism to watch the progress of the mahals remaining inoperative due to Court cases so that time-bound action can be taken for getting the cases vacated from the Courts in the interest of revenue of the State.*

---

<sup>34</sup> Dhemaji, Lakhimpur and Nagaon.





**CHAPTER – V  
OTHER POINTS OF  
INTEREST**





## CHAPTER V OTHER POINTS OF INTEREST

### 5.1 Control mechanism on extraction of forest produce

As per the system in place, no forest produce can be extracted without prior payment of royalty. However, in cases of contractors engaged by Government Departments in various construction works, permits are issued on receipt of indent from the concerned Government Departments and payment of 25 per cent of the royalty. The balance 75 per cent is deducted by the concerned Government Department at the time of settlement of bills and remitted to proper head of accounts of E&F Department.

Audit scrutiny revealed that this system has not proved to be a foolproof mechanism to safeguard against illegal extraction by contractors appointed by various Government Departments. Audit scrutiny further revealed that the E&F Department has not installed a mechanism for cross verification of information from other agencies/ organisations. These are evident from the following.

**5.1.1** In three Divisions<sup>35</sup> it was noticed that three Government Departments<sup>36</sup> have reported extraction of 58.45 lakh cum of minor forest produce like sand, stone, boulders, earth etc. by

the contractors engaged by them against which prior permission of E&F Department was not obtained. Royalty of ₹ 21.20 crore, penalty of ₹ 84.81 crore (at four times the royalty as per Rule 46 of AMMCR) and interest of ₹ 4.47 crore (at 10 per cent); totalling ₹ 110.48 crore are leviable in these cases.

As may be seen from above, the concerned forest Divisions as well as the higher authorities of the E&F Department remained unaware of the extraction of forest produce till the same was brought to their notice by the concerned Government Departments.

**5.1.2** It was also noticed that forest revenue of ₹ 7.50 crore is lying outstanding against 127 units of various Government Departments since 2006.

<sup>35</sup> Cachar, Dhemaji and Nagaon.

<sup>36</sup> Northeast Frontier Railway, NHAI and Public Works Department.

Evidently, in the cases of 127 units as stated above, the concerned drawing and disbursing officers (DDO) have not remitted the forest royalty under proper head of accounts for such a long period. Despite best efforts the E&F Department could not collect the revenue for over six years. It was further noticed that there is no penal measure in the AFR or any subsequent orders making the DDOs responsible for non-deduction of forest royalty at the time of releasing the final payments to the contractors. This arrangement is available in Central legislation like the Income Tax Act or State legislation like the Assam Value Added Tax Act which makes the DDO personally responsible for non-deduction of statutory taxes at source and failure to do so attract penalty on them.

Thus, had there been a system of cross verification of facts/figures of other agencies/organisations, the excess extraction without prior permission could have been detected by the E&F Department. Further, such a regular mechanism would have served as a deterrent to illegal extraction. An attempt to cross verify the information available in the E&F Department about supply of bamboo to HPC during 2006-07 to 2010-11 was made in Audit. However, the effort failed as the HPC authorities did not respond to requests from Audit regarding quantity of bamboo procured during the aforesaid period. Consequently, the veracity of the figures of supply of bamboo as available in the E&F Department could not be verified by Audit.

#### **Recommendation 14:**

*GOA may institute a provision making the DDOs of the Government Departments personally responsible for non-deduction of forest royalty while releasing payments to contractors. Also, they may take suitable steps for recovery of outstanding dues of the E&F Department, without further delay.*

*E&F Department may install a system of regular cross verification of the departmental figures with those of the concerned Government Departments, especially supply of bamboo with those of the HPC authorities, so as to ensure that there is no illegal extraction of forest produce and consequent loss of revenue.*

#### **5.2 Penal provisions for illegal extraction of minor forest produce**

As per the extant orders of the E&F Department issued in June 1992, in cases of illegal extraction of forest produce, monopoly fee upto 200 *per cent* was leviable in addition to forest royalty payable on the quantity of forest produce extracted.

Again, Rule 46 of the AMMCR, 1994 provides for penalty upto four times in such cases.

Audit scrutiny revealed that though management of sand, stone and boulders etc. are regulated under the AMMCR which came into force from 1994 *i.e.* after the orders of the E&F Department issued

in 1992, the forest Divisions while dealing with cases of extraction of forest produce without prior permission were still imposing 200 *per cent* monopoly fee instead of four times of the royalty as laid down by the AMMCR. One such major case is mentioned below:

For extraction of forest produce without permission by the contractors of Brahmaputra Board, the DFO, Karimganj has worked out the royalty payable as ₹ 94.63 lakh. However, monopoly fee of ₹ 1.89 crore (@ 200 *per cent* of royalty) was levied instead of ₹ 3.78 crore *i.e.* four times the royalty as prescribed in the AMMCR. This resulted in short levy of penalty of ₹ 1.89 crore only in one case. It also highlighted the need for issuing suitable clarification by the E&F Department regarding imposing penalty as per the AMMCR in case of minor forest produce like sand, stone and boulders etc.

The Department stated (November 2012) that the imposition of monopoly fees is a quasi judicial function of the authorised officer (DFO) and general instruction cannot be issued in the matter. The reply was not relevant to the observation as Audit did not question the percentage of monopoly fee levied as penal measures, instead the existence of two sets of penal measures *i.e.* 200 *per cent* monopoly fees levied under the orders of June 1992 and four times penalty leviable through AMMCR in 1994 alongwith their resultant impact was only pointed out.

#### **Recommendation 15:**

*E&F Department may issue suitable instruction to the forest Divisions regarding leviability of penalty as per AMMCR in cases of extraction of minor forest produce without permission while the monopoly fee at 200 per cent or as revised by E&F Department from time to time may continue for other forest produce like timber, bamboo etc.*

### **5.3 Provision for levy of interest for delayed payments**

As per clause 3 of Part VI of the AMMCR, 1994, in case of non-payment rent, royalty or other sums due to the State Government the same be recovered together with simple interest due at 10 *per cent* per annum.

Audit scrutiny revealed that despite availability of provisions for levy of interest on delayed/non-payments of forest royalty, the concerned Divisions while raising demands for recovery of the same did not levy interest at prescribed rates.

In 128 cases, it was noticed that interest at 10 *per cent* amounting to ₹ 4.21 crore was not levied on delayed/non-payment of royalty of ₹ 8.43 crore.

The Department stated (November 2012) that the rule is clear on the advance payment of value of the minor minerals before issuing permit and action is initiated as per the rules whenever violations take place. The reply is not

appropriate as Audit has pointed out a number of cases where forest produce has been extracted without advance payment of royalty.

#### **Recommendation 16:**

*E&F Department may issue suitable instruction to the forest Divisions regarding leviability of interest as per AMMCR in cases of delayed payment of forest royalty and other dues on extraction of minor forest produce.*

### **5.4 Functioning of Internal Audit Wing**

Internal audit – a vital component of internal control mechanism functions as ‘eyes and ears’ of an organisation and helps in assuring that the prescribed systems are functioning reasonably well.

Audit scrutiny revealed that an internal audit wing was in existence in the E&F Department with one AAO and auditor. However, it was noticed that no audit plan was prepared stating the number of Divisions to be audited in each year. Further, none of the seven Divisions covered in this performance audit was

taken up by the internal audit wing of the E&F Department during 2006-07 to 2010-11. Resultantly, the E&F Department could not detect deficiencies noticed by Audit during this performance audit and consequently could not identify the same and put in place preventive/remedial measures.

#### **Recommendation 17:**

*E&F Department may utilise the services of the personnel of internal audit wing to audit the functioning of the forest Divisions regularly.*

The Department stated (November 2012) that audit recommendation would be taken into consideration and services of the internal auditors would be utilised for internal audit of the Divisions.

### **5.5 Revenue optimisation measures**

The NWPC issued by the MoEF, GOI envisaged that ‘in a developing country like ours, economic growth and ecological stability depends, to a great extent, on judicious use of its natural resources and urged for a need for scientific management of forests in the country’.

A number of areas have been identified in this performance audit, which if examined and implemented by the E&F Department can augment revenues from forest resources to large extent without compromising the ecological balance which is the primary mission of the E&F Department. However, it

was noticed in audit that the GOA or the E&F Department is yet to initiate measures for revenue optimisation.

It was further observed in Audit<sup>37</sup> that other States having considerable forest cover like Odisha, Madhya Pradesh etc. have set up expert committees. Of these, the term of reference of the Committee set up by Government of Odisha was to:

- examine revenue accrual from the existing tax and non-tax sources in relation to the potential available and suggest appropriate measures for higher revenue realisation from these sources;
- identify new avenues for mobilisation of additional resources; and
- suggest other measures, as deemed necessary, for augmenting State's own revenue.

#### Recommendation 18:

*GOA/E&F Department may initiate measures for revenue optimisation for maximising revenue from available forest resources and identifying new avenues for mobilisation of additional resources in the interest of State revenues.*

The Department stated (November 2012) that as suggested by Audit expert committees may be constituted for augmenting the revenues and optimising the revenue collection and tap the revenue potential of available resources without affecting the ecological security and environmental sustainability of the State.

#### 5.6 Levy fees

Levy fee is a fee charged at the inter-state border on forest produce imported from other States.

Levy fee is levied to set equilibrium between the rates of royalty in Assam in comparison to those of neighbouring States.

Audit scrutiny revealed that the GOA had fixed levy fee long back in 1990 at ₹ 10 per truck carrying forest produce. Though rates of royalty has increased manifold in the meantime, the GOA has not revised the rates of levy fee.

It was further noticed from an analysis carried out by E&F Department in February 2007 that while the rates of royalty on sand and stone in Assam were ₹ 70 and ₹ 100 per cum respectively, the same were ₹ 30 and ₹ 80 per cum in Meghalaya. Consequently, the purchasers in Assam are procuring these materials from Meghalaya hampering the *mahals* in Assam with lesser prospect and reduced sale value. On the basis of the analysis, the E&F Department has in March 2007 proposed to increase levy fee from ₹ 10 per truck to ₹ 100 per truck. However, GOA has not notified the revised rates yet. Consequently, purchasers in Assam still tend to import forest produce from other neighbouring States wherein rates of royalty are lesser than Assam.

<sup>37</sup> Through google search

This resulted in loss of revenue of ₹ 32.50 lakh<sup>38</sup> (at ₹ 100 minus ₹ 10 per truck) on account of non-revision of levy fee calculated on 37,242 trucks. Of this 15,066 trucks contained 75,330 cum stone which were imported from other States due to the difference in rates of royalty and resultantly led to loss of ₹ 77.28 lakh<sup>39</sup> to the State exchequer. The impact on revenues of Assam due to non-revision as stated above is only a pointer and based on information relating to **only one Division**.

#### **Recommendation 19:**

*GOA may expedite notifying the revised rates of levy fee to ensure equilibrium in the rates of royalty on forest produce in Assam and those in neighbouring States which would in turn discourage influx of forest produce from other States and consequent increase in sale of forest produce belonging to Assam and revenue generated therefrom.*

The Department stated (November 2012) that GOA may examine the legal issue on imposition of levy fees to maintain equilibrium of the royalty rates with the neighbouring states for various minor minerals.

<sup>38</sup> Based on information on entry of trucks carrying forest produce from other States as furnished by Cachar and Karimganj Divisions. The other Divisions did not respond with the information despite being requested.

<sup>39</sup> Calculated taking into account the rates of royalty on Stone in Assam during the relevant period.



**CHAPTER – VI  
CONCLUSION AND  
RECOMMENDATIONS**







## CHAPTER VI

### CONCLUSION AND RECOMMENDATIONS

#### 6.1 Conclusion

The 'NWPC' as well as the 'Assam Forest Policy 2004' provide for achieving judicious use of natural resources to maximise economic return from the available potential. This can be achieved through sustained exploitation of forest produce and tapping the potential of unexplored avenues at its optimal level. Audit scrutiny revealed that though the GOA/E&F Department had taken a number of steps towards the above goals, there are a number of issues which if considered by them could help in ensuring better management and control on forest produce as well as augment the receipts of the Department to large extent.

Re-designing the existing WPs/preparing the WPs in the lines of NWPC to commence silvicultural operations of timber would ensure flow of legal timber in the market which would contain illegal felling while generating much needed revenue for the State exchequer. Despite orders of the GOA to fix the market rate/average price of previous sales as the base price while selling timber on auction, the Divisions fixed royalty rates as base price while in some cases timber lots were sold even below the royalty rates which deprived the State exchequer of additional revenue. Fixation of base price by linking it with the prevalent market rates of timber would ensure optimisation of revenue from sale of timber on auction. Due to the absence of a State-wise database on availability of timber by FUO Division, there was deprivation of revenue/outgo of Government money as timber was available in the forest Divisions. Missing/lost hammers have the risk of being used in transporting illegally felled timber if these fall in the hands of miscreants.

**Timber**

Effective management of available bamboo resources in the State would enable generation of revenue of more than ₹ 50 crore per annum only from sale of bamboo. Non-finalisation of WPs prior to expiry of the existing WPs led to stoppage of supply of bamboo to HPC Mills leading to loss of revenue besides affecting the felling rotation of bamboo. Fixation of royalty on supply of bamboo to HPC mills at abnormally lower rates in comparison to the rates of royalty and the market rates led to deprivation of revenue to State exchequer while benefitting the contractors who were supplying bamboo to HPC mills. Supply of bamboo at 'air dried' instead of 'green' basis led to loss of revenue.

**Bamboo**

Though the E&F Department has carried out a detailed study on fixation of royalty on minor forest produce like sand, stone and boulders etc., the GOA accepted only the rates so fixed instead of the methodology of fixing the royalty through market survey at regular intervals. This would have enabled the GOA to fix the rates of royalty on more scientific basis aligned to the market rates of the forest produce. There was loss of revenue due to non-revision of rates of royalty due in 2007 and non-application of nearest *mahal* rate while issuing permits despite the orders of GOA. Irregular and unjust decision of GOA on extraction of sand, stone, boulders on payment of royalty ignoring the previous decisions against the same led to huge loss of revenue while extending undue benefit to the

**Minor forest  
produce**

contractors. Sand, stone and boulder *mahals* remained inoperative for substantial periods of time also led to loss of revenue.

Absence of a mechanism for making the DDOs of Government Departments responsible for non-deduction of forest royalty while releasing payments to the contractors coupled with absence of a system for cross verification of records of Government Departments led to illegal extraction of forest produce by the contractors deputed by Government Departments and consequential non-realisation of substantial revenue. Despite availability of penal and interest provisions in the AMMCR, these were not being imposed by the forest Divisions. Initiation of revenue optimisation measures would have helped in maximising revenue from available resources as well as identify new avenues for mobilisation of additional resources. Due to the absence of reports/returns, higher authorities remained unaware about a number of key issues affecting control measures and revenue realisation which would need to be addressed in a timebound manner. Utilising the internal audit wing more effectively would enable the E&F Department to ensure that the activities of the Department were functioning reasonably well.

**Other areas of interest and internal controls**

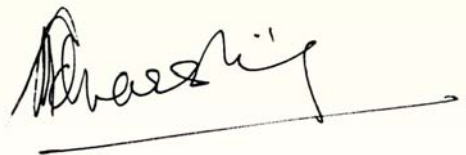
## 6.2 Summary of recommendations

The GOA/E&F Department should ensure management of available forest resources effectively through good governance keeping in view the parameters prescribed by the Central and State Legislations for optimising revenue yield without compromising the ecological balance. Implementation of the recommendations under respective paragraphs of this performance audit report with special emphasis on the following would help the GOA/E&F Department in achieving the same:

- *steps may be initiated to revise the existing WPs which are in currency/prepare the WPs in accordance with the format of NWPC prescribed by MoEF, GOI for exploitation of available forest resources;*
- *systems need to be prescribed for (i) collecting the market rates from reliable sources by various Divisions and (ii) suitably benchmark these 'market rates' as an indicator while fixing the base price for sale of timber;*
- *system of supplying bamboo to HPC through contractors appointed by it may be revisited to replace it with a system of putting the bamboo coupes under sale through mahal operation;*
- *immediate steps need to be initiated to ensure that the system of procurement (i.e. on MTG basis) applicable in case of bamboo procured from other sources is applied in case of bamboo procured from Assam as well;*
- *a policy may be installed for augmenting supply of bamboo to the HPC Mills by ensuring optimum extraction of bamboo;*
- *the orders for revising the rates of royalty by 15 per cent every two years and also the orders for application of nearest mahal rates while issuing permits for extraction of minor forest produce need to be revisited. Instead, the methodology for fixation of royalty at periodical interval calculated on prescribed percentage of the market rates as per the study conducted by E&F Department in 2003 may be implemented;*
- *the decision of allowing contractors of NHAI to extract sand, stone, boulders etc. at 'simple royalty' despite availability of the details of the rates at which work*

*orders were issued by the NHAI to its contractors needs to be investigated. The possibility of recovering the differential royalty from the contractors of NHAI may also be explored. Simultaneously, orders should be issued to the forest Divisions for collecting royalty at par with those at which NHAI has issued work orders to the contractors;*

- *the DDOs of the Government Departments may be made personally responsible for non-deduction of forest royalty while releasing payments to contractors;*
- *a system of regular cross verification of the departmental figures with those of the concerned Government Departments needs to be installed;*
- *the services of the personnel of internal audit wing may be utilised to audit the functioning of the forest Divisions regularly;*
- *measures for revenue optimisation need to be initiated for maximising revenue from available forest resources and identifying new avenues for mobilisation of additional resources; and*
- *the levy fee needs to be revised to ensure equilibrium in the rates of royalty on forest produce in Assam and those applicable in neighbouring States.*



**Date:**

**(C H Kharshiing)**

**Place: Guwahati**

**Accountant General (Audit)**

**Countersigned**

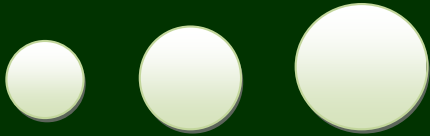


**Date:**

**(Vinod Rai)**

**Place: New Delhi**

**Comptroller and Auditor General of India**



**ANNEXURE**

## Annexure - A



राष्ट्रीय राजमार्ग प्राधिकरण  
(परिवहन, सड़क परिवहन और राजमार्ग मंत्रालय)  
**National Highways Authority of India**  
(Ministry of Shipping, Road Transport & Highways)  
Project Implementation Unit (P.I.U.)  
Suraj Nagar, Mukunda Path,  
G. S. Road, Khanapara, Guwahati - 781022

Phone : 0361-2233207  
Tele & Fax : 0361-2233209  
E-mail : piunhaighy@onlysmart.com  
: guw@nhai.org

NHA/PIU/GHY/FOREST/2005/51

Date: 18.08.05

To

✓ The Joint Secretary  
Govt. of Assam,  
Environment and Forest Department.

Sub: Enlistment of National Highways Authority of India in the forest royalty schedule.

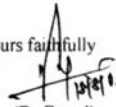
Ref: 1. Govt. letter no. FRM/232/2003/79 dt. 27.06.05  
2. CCFT letter no. FGT/58/Misc/Permit/NHAI dt. 14.07.05

Sir,

As desired by you, I am enclosing herewith the tentative requirement of forest produces in different segment of highways under East West corridor project with their market price. The total quantity of forest produces may vary at the time of actual execution. The rate/m<sup>3</sup> of the different materials have been collected by our DPR consultants at the time of preparation of the project report which may vary to an extent as per demand and availability.

It is to mention here that except a few packages in NC Hills District all most all the stretches have been awarded to the civil contractor as per the list enclosed herewith. So, you are hereby requested to issue permit to our contractor as per the requirement on phase manner to enable them to extract the materials urgently.

Yours faithfully

  
(D. Gogoi)  
Project Director

Encl: As above

Copy to: 1. The CGM (EW-1), NHA, G-5 & 6, Sector-10, Dwarka, New Delhi-75  
2. The CCFT, panbazar Guwahati-1

**Details of latest Civil Works awarded under NHDP-II on EW Corridor  
In Assam With the total requirement of forest produces.**

Sl. No.	NH. No	Chainage	Stretch	Executing Agency	Tentative requirement of forest produces m <sup>3</sup>			Rate of Forest Produce at Source			Quarry
					Stone	Boulder	sand	stone	Boulder	sand	
1.	31C	0-30	30 km	PCL	6,50,000	5,50,000	14,50,000	700/m <sup>3</sup>	500/m <sup>3</sup>	320/m <sup>3</sup>	River Sonkoch sonamukhi Hill quarry river Aie.
2.		30-60	30 km	GPL-ECL(JV)	7,48,000	5,02,000	15,00,000				
3.		60-93	33 km	GPL-ECL(JV)	5,53,000	4,90,000	1,70,000				
4.	31	961-983	22 km	Punj Lloyd	4,50,000	3,85,000	1,20,000				
5.		983-1013	30 km	Punj Lloyd	7,97,000	4,00,000	2,00,000				River Sonkoch sonamukhi hill quarry river Aie.
6.		1013-1040	27 km	KMC	7,54,000	7,000	23,000				Kana-makra river quarry
7.		1040-1065	25 km	DRA-BLA-BCL(JV)	7,54,000	6,500	23,000	625/m <sup>3</sup>	454/m <sup>3</sup>	320/m <sup>3</sup>	Khagrabari river quarry
8.		1065-1093	28 km	Punj Lloyd	3,50,000	2,90,000	8,000				Barmali river.
9.		1093-1121	28 km	Punj Lloyd	3,70,000	2,70,000	61,000				Motongona ss mahal. Kukurmara changsari.
10.		1121-1126	5 km	PQ is in Progress	72,750	6,475	56,250	575/m <sup>3</sup>	470/m <sup>3</sup>	317/m <sup>3</sup>	
11.	37	163-183	20 km	MBL-TCIL (JV)	5,40,000	13,000	15,300	750/m <sup>3</sup>	500/m <sup>3</sup>	217/m <sup>3</sup>	Jagrood hill quarry Digaru sand quarry
12.	37	156-146	10 km	MBL	98,500	17,800	29,500		454/m <sup>3</sup>	310/m <sup>3</sup>	
13.		183-205	22 km	KMC	7,77,000	14,500	11,70,000				
14.		205-230	25 km	MYTAS	8,54,000	16,000	1,19,000				
15.		230-255	25 km	MADHUCON	6,75,000	14,500	1,19,000				
16.		Nagaon By-Pass	23 km	PATEL-KNR(JV)	35,000	17,000	1,00,000				
17.	36	550-3590	30.40km	MYTAS	11,71,000	22,000	1,66,000				
18.	54	Lumding to Doboka By-Pass of 4.2 km	24 km	Punj Lloyd	73,218	4,773	54,326	650/m <sup>3</sup>	393/m <sup>3</sup>	317/m <sup>3</sup>	Siakhalata Haria river killing river killing river. Amsoi village khatalguri Jamuna river. Mandortali



Sl. No.	NH. No.	Chainage	Stretch	Executing Agency	Tentative requirement of forest produces m <sup>3</sup>			Rate of Forest Produce at Source			Quarry
					Stone	Boulder	sand	stone	Boulder	sand	
19.		306.54-275	26 km	Punj Lloyd	363000	67500	250000	590/m <sup>3</sup>	275/m <sup>3</sup>	150/m <sup>3</sup>	Jatinga Dolu
20.		275-244	31 km		735000	85700	375000				
21.		244-178	66 km		375000	735240	735240				
22.		178-154	24 km		126754	295000	295000				
23.	54	154-140	14 km	PQ is in Progress	130000	40275	125790				
24.		140-115	25 km		185000	60346	95000	450/m <sup>3</sup>	317/m <sup>3</sup>	225/m <sup>3</sup>	
25.		115-90	25 km		185000	60346	135240				
26.		90-65	25 km		185000	60346	135240				
27.		65-40	25 km		145000	55740	135240				
28.		40-22	18 km		456000	25470	105000			317/m <sup>3</sup>	

1,71,20,733 m <sup>3</sup>	77,71,126m <sup>3</sup>
Average Rate of	
Stone:	₹ 620/ m <sup>3</sup>
Boulder:	₹ 420/ m <sup>3</sup>
Sand:	₹ 275/ m <sup>3</sup>

₹ 520/ m<sup>3</sup>