

Protection, Conservation and Development of Forests in Goa

Goa has a forest coverage of 1,424.46 sq km, which represents 38 per cent of the geographical area (3,702 sq km) of the State. There are six Wildlife Sanctuaries, one National Park and one Zoo in the State, covering an area of 754.91 sq km. The State Forest Policy for the sustainable management of the forests of the State was still to be finalized. While the Management Plan for one Wildlife Sanctuary was prepared, the same for the other Wildlife Sanctuaries and one National Park were still to be prepared. There were delays in utilisation of funds under the Centrally sponsored schemes meant for protection of forests, their conservation and development resulting in the department losing funds from the Centre. Mutation in land records was not completed despite High Level Committee directions of May 2007. Conservation of forests suffered due to poor implementation of the Preservation of Trees Act, 1984 and the Forest Conservation Act, 1980.

Highlights

- The final notification on the State Forest Policy was pending though recommended by the National Forest Commission in March 2006.
- The working plans of the North and South territorial divisions were pending approval of Government. The department did not prepare Management Plans for the five Wildlife Sanctuaries and one National Park.
- Incorrect levy of security deposit on trees permitted to be cut instead of on trees to be replanted resulted in short recovery of ₹ 2.88 crore as security deposit during the period 2005-11.
- Compensatory afforestation charges recoverable from user agencies on diversion of forest land for non-forest purposes were not revised from 2002, despite increase in daily wage rates.
- Independent monitoring and evaluation of works under the Compensatory Afforestation Fund Management and Planning Authority was not carried out by the department.
- In 70.12 *per cent* cases of works of raising and maintenance of plantations, the estimates were sanctioned after commencement of the works while in 12.80 *per cent*, the estimates for the works were sanctioned after completion of the works during 2008-11. None of the divisions prepared work completion reports.
- Survival reports in respect of plantations carried out were not available in 143 out of 162 cases during 2006-11 and the shortfall in conducting inspection of plantations was 77.31 *per cent*.

2.1.1 Introduction

The State of Goa has forest coverage of 1,224.46 sq km under three categories (Reserve Forest- 251.44 sq km, Protected Forest- 711.44 sq km and Unclassed Forest- 261.58 sq km) apart from private forests of 200 sq km, which together represent 38 *per cent* of the geographical area (3,702 sq km) of the State. There is one National Park, six Wildlife Sanctuaries and one Zoo in the State, covering an area of 754.91 sq km. The management of forests in the State is regulated by the Indian Forests Act, 1927, the Wildlife

(Protection) Act, 1972, the Goa, Daman and Diu Preservation of Trees Act, 1984 and the Forest (Conservation) Act, 1980. The major functions of the department involve protection, conservation and development of forests; conservation of wildlife and management of protected areas; undertaking soil conservation and water harvesting measures to ensure sustained supply of natural resources; rescue and rehabilitation of wild animals etc. These functions are discharged by carrying out activities like rehabilitation of degraded forests; afforestation of denuded lands; supply of timber and fuelwood; urban forestry, protection of wildlife and development of habitats, etc.

2.1.2 Organizational Set-up

The Chief Secretary holds the overall charge of the Forest Department. The department is headed by an Additional Principal Chief Conservator of Forests (APCCF) assisted by a Chief Conservator of Forests (CCF) and two Conservators of Forests. At the field level, there are divisions for Research and Utilisation, Working Plan, Soil Conservation, Social Forestry, two territorial divisions (North and South) and one division looking after the aspects of Wildlife and Eco-Tourism. All the divisions are headed by a Deputy Conservator of Forests (DCF).

2.1.3 Scope and coverage of audit

Records for the period 2006-07 to 2010-11 maintained by the Forest Department at the Secretariat, the office of the APCCF, all the seven divisions and 28 Range Offices were test-checked during the period April to June 2011.

2.1.4 Audit methodology

The performance audit was carried out by preparing audit guidelines, collecting data and holding discussions with the officers of the implementing and monitoring department. An entry conference and an exit conference were held in April 2011 and August 2011 respectively with the APCCF.

2.1.5 Audit objectives

The objectives of the performance audit were to assess:

- whether a forest policy was in place to protect and restore forests
- whether planning and execution of the programmes were adequate
- whether financial control and fund management were adequate
- whether schemes were implemented economically, efficiently and effectively as per the prescribed conditions
- whether human resource management was adequate
- whether an effective monitoring mechanism and internal control system was in place.

2.1.6 Audit criteria

The performance of the department was assessed on the basis of the following criteria keeping in view the audit objectives.

- National Forest Policy, 1988; Indian Forest Act, 1927;
- Goa, Daman and Diu Forest Code and Goa, Daman and Diu Forest Rules, 1964;
- Forest (Conservation) Act, 1980 and Rules;
- Goa, Daman and Diu Preservation of Trees Act, 1984;
- Government of Goa (Receipt and Payments) Rules, 1997;
- Manual of guidelines and accounting procedure for State
- Compensatory Afforestation Fund Management and Planning Authority.

Audit Findings

The important points noticed during the course of audit are discussed in the succeeding paragraphs.

2.1.7 Planning

2.1.7.1 Delay in notifying the State Forest Policy

The National Forest Commission recommended (March 2006) that each State should have its own forest policy within the broad parameters of the National Forest Policy, 1988 for sustainable management of the forests of the States. The policy, inter alia, was to address issues pertaining to conserving natural forests, increasing sustainability of forest/tree cover through massive afforestation and social forestry programmes. In pursuance of the National Forest Commission's recommendations (March 2006), the department prepared the draft State Forest Policy belatedly in May 2009. The objective of the State Forest Policy was to protect Government forest areas; conservation and management of forests on sustainable forest management principles; conserving the natural heritage of the State by preserving natural forests; maintaining of environmental stability through preservation and restoration of the ecological balance; increasing the tree cover, improving the canopy density of forests through massive afforestation and social forestry programmes etc. The State Government constituted (August 2009) a committee consisting of members of various line departments³ to study the draft Forest Policy and to give its recommendations. Based on the suggestions/comments received from the members, the draft Forest Policy was finalized and forwarded (March 2010) to the Cabinet for approval. Following a directive from the Cabinet, the draft notification was published (April 2011) in the Official Gazette of the Government of Goa, inviting suggestions, which were to be submitted within 60 days. Final notification of the Forest Policy after considering the suggestions from the public was pending as on date (October 2011). Thus, despite a lapse of five years from the date of recommendation of the National Forest Commission for the formulation of the State Forest Policy, the same was yet to be notified. During the exit conference, the APCCF stated (August 2011) that the Government was planning to constitute a committee to go through the suggestions received from the public.

2.1.7.2 Non-finalisation of Working Plan

The Working Plan of the department is prepared for the scientific management of natural forest areas. It is prepared for a period of 10 years, after which it is revised. Without such plans, there is a danger that

the forests may be worked below their capabilities and income lost. The Working Plan also envisages replacement of old uneconomical plantation species with commercially viable fast-growing indigenous species and tending of older plantations i.e. thinning etc. to promote optimum growth. No harvesting of forest produce like timber and other materials is permitted without a Working Plan duly approved by Government of India (GOI). The Working Plan Division of the department is responsible for the preparation of Working Plans for both the North and South Divisions. The Working Plan of the North Division was prepared by the department only for the period 1979-80 to 1988-89. Thereafter, no Working Plan was prepared by the department for any of the divisions. The Government constituted (January 2007) a High-Powered Committee to oversee the exercise of preparation and finalization of Working Plans. The draft Working Plans of the North and South Divisions were submitted to the CCF in December 2006 and November 2007 respectively. The Government also constituted (July 2008) a committee to examine the draft Working Plans, which recommended (June 2009) that the Plans should be approved by the Government. The draft Working Plans were submitted (April 2010) to the Government by the Forest Department. However, from the records produced to Audit, it was seen that no further action had been initiated on the matter till date (April 2011). Thus, despite preparation of the Working Plans in December 2006 and November 2007 and the recommendation by the committee in June 2009, the same had not been approved by the State Government. As per the draft Working Plans of the North and South Divisions, harvesting of teak, eucalyptus and acacia plantations in 490.62 hectares was to be done during the year 2010-11. Thus, the delay in approval of Working Plans resulted in delayed realization of revenue due to non-harvesting of timber, eucalyptus and acacia plantations. The delay also resulted in non-attainment of the objective of replacement of old uneconomical plantation species with commercially viable fast-growing indigenous species and tending of older plantations to promote optimum growth. During the exit conference, the APCCF stated (August 2011) that the Government had directed the Working Plan Division to resubmit the file.

2.1.7.3 Non-preparation of Management Plan

The Management Plan of the department is a comprehensive document related to forest areas included in Wildlife Sanctuaries (WLSs) and the National Park (NP), detailing every aspect of the WLS and NP, including its history, flora, fauna, current status etc. as also ways to maintain and improve the existing diversity of flora and fauna. The Wildlife and Eco Tourism Division of the department had to prepare Management Plans for its six WLSs and one NP. A committee to examine and give suitable recommendations for the draft Management Plans was constituted in August 2009. The Management Plan for Cotigao WLS was approved (December 2010) by the APCCF after examination by the committee and the draft Management Plan for Bhagwan Mahavir WLS was prepared in 2009-10 and put up to the committee. Though the committee had conveyed (January 2010) its comments on the Management Plan for the Bhagwan Mahavir WLS, the Management Plan was still to be finalized (June 2011), after incorporating the comments of the committee. The draft Management Plans for Bhagwan Mahavir NP and Dr. Salim Ali Bird Sanctuary were also prepared (May 2011) but had not been put up before the committee (July 2011). The draft Management Plan for the other three sanctuaries, viz. Madei WLS, Netravali WLS and Bondla WLS had not been prepared (June 2011). The non-preparation and delays in

the preparation of Management Plans deprived the WLSs/NPs of systematic development. During the exit conference, the APCCF stated (August 2011) that the department would finalize the three Management Plans already prepared and prepare the Management Plans for the remaining three WLSs.

2.1.8 Financial Management

2.1.8.1 Budget provision and expenditure

The position of budget estimates and actual expenditure on protection, conservation and development of forests during the period 2006-11 is tabulated below:

Table 1: Budget provisions and expenditure
(₹ in crore)

Year	Budget estimate	Actual expenditure	Savings	Percentage of savings
2006-07	12.96	11.60	1.36	10
2007-08	14.74	14.59	0.15	1
2008-09	19.46	19.36	0.10	1
2009-10	24.91	24.40	0.51	2
2010-11	24.67	22.71	1.96	8
Total	96.74	92.66	4.08	

(Source: Figures for 2006-10 from excess/savings statement and for 2010-11 from details for detourals for grants and expenditure register)

2.1.8.2 Physical targets and achievements

The Forest Department is implementing a number of State schemes such as forest conservation and development, social and urban forestry, rehabilitation of degraded forests/older plantations, etc. Targets were fixed for components of raising of nurseries, afforestation, boundary clearance, cultural operations, avenue plantations etc. under the above schemes. Scrutiny of the achievements revealed that targets under the components of 'afforestation' and 'avenue plantation' under the social and urban forestry scheme and 'afforestation/plantation' and 'soil conservation' under the Western Ghat Development Programme were achieved. However, there were shortfalls in the achievement of targets under the component, 'raising of nursery' under the social and urban forestry scheme, rehabilitation of degraded forests/older plantations scheme and the Western Ghat Development Programme during 2006-11. The achievements in raising of nursery were 21.36 lakh seedlings (92 *per cent*), under social and urban forestry, four lakh seedlings (54 *per cent*) under rehabilitation of degraded forests/older plantations and 15.39 lakh seedlings (91 *per cent*) under Western Ghat Development Programme against the targets of 23.25 lakh, 7.35 lakh and 17 lakh respectively. The achievements under the component, 'cultural operations under the forest conservation and development scheme' was only 613 hectares (70 *per cent*) against the target of 880 hectares for the period 2008-11. The DCF, Planning and Statistics (P&S) without giving detailed reasons, attributed (June 2011) the shortfalls in achievements to technical and administrative reasons.

2.1.9 Protection of forests

Protection of forests is one of the primary responsibilities of the Forest Department. The function of the department relating to protection of forests includes notification of unclassified forests under Section 4 and Section 20 of the Indian Forest Act; mutation in revenue records in respect of notified reserve forests; protection of forests against fires, cattle grazing, illegal cutting of trees including trees outside forest areas etc. The audit findings in this regard are discussed below:

2.1.9.1 Integrated Forest Protection Scheme

Protection of forests resources requires a strong infrastructure at the disposal of the State Forest Department. The existing infrastructure is grossly inadequate due to paucity of funds to deal with the task of forest protection. To meet the emergent requirement of State Forests Departments, the Integrated Forest Protection scheme (IFPS) was made operational by the Ministry of Environment and Forests (MoEF), Government of India (GOI) during the X Five Year Plan with three components namely (a) forest fire control and maintenance (b) strengthening of infrastructure for forest protection and (c) preparation of working plan/survey and demarcation.

(a) Delay in utilization of funds under the scheme

The IFPS was funded both by the Central and State Government on 75:25 basis. Funds were to be released in two instalments in a financial year. The second instalment was to be released only after receipt of the utilisation certificate for the funds released during the previous year. The utilization certificate was required to show utilisation of funds for more than 50 *per cent* of the first instalment of the year and a certificate to the effect that at least 70 *per cent* of the first instalment released had since been committed. Scrutiny revealed that proposals for the scheme were invited by MoEF from all State Forest Departments between March-April for 2006-10 and November 2009 for 2010-11 with tentative allocation and were to be submitted latest by April-May and December respectively. Details of the dates of calling for the proposals by MoEF, dates of submission of proposals, amount sanctioned etc. were as given in **Table 2** below:-

Table 2: Statement showing the due dates for sending proposals, actual dates of submission, amounts proposed and sanctioned

Year	Date of letter of MoEF calling for proposals	Date by which the proposal was to be sent to MoEF	Date of sending of the proposal to MoEF	Delay (Number of days)	Amount	
					for which proposal sent to MoEF	sanctioned by MoEF
(₹ in lakh)						
2006-07	31.03.2006	26.04.2006	17.06.2006	51	50.00	47.70
2007-08	19.03.2007	10.04.2007	23.07.2007	103	50.00	40.30
2008-09	25.04.2008	25.05.2008	03.10.2008	129	85.31	44.04
2009-10	04.03.2009	04.04.2009	10.08.2009	126	124.08	33.22
2010-11	27.11.2009	10.12.2009	15.06.2010	185	104.29	31.25

(Source: OOI letters requesting for proposals and proposals sent by departments)

Though the Central share of tentative allocation had gone up from ₹ 50 lakh to ₹ 1.04 crore, the amount sanctioned by MoEF had gone down from ₹47.70 lakh to ₹ 31.25 lakh during 2006-11. The proposals for funds were submitted between June to October after delays of 51 (2006-07) to 185 (2010-11) days, which resulted in delay in sanctions and receipt of funds from MoEF and their utilisation. The details of mounts lying unspent at the beginning of the year, amounts sanctioned, amounts released and spent during the period 2006-11 were as given in **Table 3** below:-

Table 3: Statement showing amount sanctioned, released and spent

(₹ in Lakh)

Year	Opening balance	Amount sanctioned	Amount released	Amount available	Amount spent	Closing balance
2006-07	29.01	47.70	Nil	29.01	15.30	13.71
2007-08	13.71	40.30	18.53	32.24	24.37	7.87
2008-09	7.87	44.04	27.37	35.24	33.23	2.01
2009-10	2.01	33.22	24.57	26.58	26.58	Nil
2010-11	Nil	31.25	25.00	25.00	20.22	4.78
Total		196.51	95.47		119.70	

(Source: OCA sanction/release orders and utilization/expenditure statement)

Eight watch-towers for keeping a watch on forest fires were proposed for construction at Mollem, Satpal (two number each) Chandel, Pernem. Bondla, Cotigao (one number each) during 2006-10 costing ₹ 16 lakh. However, only two were constructed at Chandel and Bondla (one each) during 2006-10 at a cost of ₹ 3.62 lakh. Further, against a provision of ₹ eight lakh during 2006-10 for purchase of firefighting equipment, only ₹ 1.58 lakh was spent. Construction of anti-poaching-cum-patrolling stations (one each) was proposed in 2006-07 and 2007-08 costing ₹ 8.71 lakh. Further, construction of one building for 'B' type quarters at Usgao Tisk Timber Depot costing ₹ six lakh during 2007-08 and two fire protection offices (each costing ₹ 3.50 lakh) in 2008-09 and 2009-10 were approved by MoEF. None of these were taken up, depriving the State of infrastructure built out of Central assistance. A Review and Monitoring Committee under the Chairmanship of the Principal Chief Conservator of Forests was to be constituted for review of the scheme, whose meetings were required to be held at least every six months. It was seen that the committee was constituted only in March 2010, though the scheme was in operation since 2002-03.

(b) Delay in submission of Utilisation Certificates

An amount of ₹ 95.47 lakh (49 per cent) was released during the period 2006-11 against the sanctioned amount of ₹ 1.97 crore as the department failed to submit the utilization certificates required under the scheme and was, therefore, deprived of assistance of ₹ 1.01 crore. This was due to failure of the department. The DCF, (Planning and Statistics) replied (June 2011) that the preparation of proposals was time-consuming and hence, there was delay in preparing and sending the proposals to MoEF. The delay in utilization of funds was attributed to late receipt of sanctions and considerable time spent on observing codal formalities. The reason for delay in preparation of proposals is not acceptable as this

process should have been started well in advance as it was an ongoing scheme. The delay in utilization of funds could also have been avoided if the proposals had been sent on time.

2.1.9.2 Pending cases with Forest Settlement Officers

Unclassed forests are notified under Section 4 of the Indian Forest Act, 1927 (IFA) and claims of the persons claiming title to the land are settled by Forest Settlement Officers (FSO) who are quasi-judicial officers from the Revenue Department. Thereafter, the forest areas are demarcated and notified as Reserved Forests under Section 20 of the IFA by the department. As on April 2011, 163 cases involving 68,677.03 hectares of forest land were pending with FSOs from the period 1974 to 2011 out of which 669.45 hectares of forest land were notified under Section 4 of the IFA during the period 2006-11. During the period 2006-11, 600.11 hectares of forest land were notified under Section 20 of IFA. Test check of 21 cases revealed delays in taking action for settlement both by FSOs and the department. North and South Divisions did not have any control register for noting therein the instructions given to Range Forest Officers (RFOs), watching compliance, sending reminders to RFOs and FSOs, etc. for ensuring effective watch on each case. The delay in notifying the forest areas under Section 20 of the IFA hampered the protection, conservation and development of such forest areas. A High Level Committee, constituted (March 2007) by the State Government to oversee various anomalies that had crept into the making of the 1979 Working Plan of North Division, attributed the delays in finalizing the cases to delays by the department and also to additional work-load of FSOs owing to the additional charge of other departments. Based on the points raised in the High Level Committee, the CCF decided (May 2007) to move a proposal for posting of an independent FSO so as to expedite settlement proceedings. However, no action was taken by the department to move the proposal for posting of independent FSO. During the exit conference, the APCCF stated (August 2011) that the department intends to submit a proposal to the Government for posting of independent FSO.

2.1.9.3 Non-completion of mutation in land records

The High Level Committee, mentioned in para 2.1.9.2, directed (April 2007) the department that mutation in revenue records was to be done in respect of notified reserve forests under Section 20 of the IFA to avoid disputes on the ownership of the land due to non-updating of records. The area of reserve forest land in Goa as on March 2011 was 25,144 hectares. The DCF, North Division directed (May 2010) all the RFOs to file mutation applications in respect of reserved forests in a time-bound manner and submit monthly progress reports. No time limit was fixed for filing the mutation applications nor was the progress watched by the division office. Except for Valpoi Range, monthly progress reports were not submitted by any of the Range Offices. Similar directions issued by the DCF, South Division to its Range Offices were not available on record. No records of the mutation applications filed by the Range Offices were available at the divisions. The DCF, North Division stated (July 2011) that all RFOs had been directed to carry out the mutation and submit the reports regularly but the reply was silent regarding the delay in instructing the RFOs to file mutation applications. The DCF, South Division stated (June 2011) that instructions had been issued to Range Offices to take necessary action. Thus, the process of mutation which was required to prevent disputes on the title to land remained unfinished despite the direction of the High Level Committee in April 2007. During the exit conference, the APCCF

agreed (August 2011) to the importance of mutation and directed the divisions to take up the matter with the Collectors for completing the mutation process expeditiously.

2.1.9.4 Pending offence cases

As on June 2011, 94 offence cases registered during 2003-11 under the Preservation of Trees Act, 1984 (PTA) and the Indian Forest Act, 1927 (IFA) were pending with the department. As per the above two Acts, offence cases were to be enquired into expeditiously and sent for compounding within six months. However, it was found that 58 out of 70 cases registered during 2003-10 remained pending for want of enquiry reports from the Range Offices. Offence cases reported by the RFOs to the divisions are recorded in offence case registers which show the nature of the offences, amounts to be paid by the offenders on compounding of the offences etc. The dates of payment by the offenders are also noted in the registers based on the compliance reports submitted by the RFOs. Scrutiny of the offence case registered in the office of the DCF, South Division revealed that out of 109 cases compounded during 2006-11, in 74 cases, recovery of ₹ 10.95 lakh was not recorded in the register as compliance reports from the RFOs had not been received. The matter had also not been pursued by the DCF, South Division with the RFOs. The DCF, South Division stated (June 2011) that a special drive had been initiated to dispose pending cases and accordingly, 253 cases had been disposed off during 2010-11. It was further stated that directions had been issued to Range Offices to furnish compliance with the compounding orders and details of recoveries would be intimated to Audit. During the exit conference, the APCCF stated (August 2011) that a committee had been formed for monitoring the offence cases.

2.1.9.5 Non-functioning of the Fire Monitoring Cell

Forest fires are one of the major causes for destruction of forest areas. MoEF had instructed (February 2006) all the State Forest Departments to create 'Fire Monitoring Cells' and to appoint nodal offices for forest fires. Accordingly, the State Government notified (March 2008) the constitution of a 'Forest Fire Monitoring Cell' with the DCF, Working Plan (DCF, WP) Division as the nodal officer. The DCF, WP was required to monitor the forest fire incidence in the State by conducting a preliminary survey of the forest areas and prepare an index map of fire-prone areas, which would enable the department to design the location of fire lines. At the end of the fire season every year, the nodal officer was to prepare a map indicating fire occurrences and ascertain the damages caused, for submission to the APCCF. Despite the lapse of three years since the constitution of the cell, there was no feedback available in respect of forest fires or conducting of any survey of fire-prone areas. During the exit conference, the APCCF stated (August 2011) that no reports had been submitted by the Cell and that the matter would be pursued.

2.1.10 Conservation of forests

The conservation functions of the department include compensatory afforestation on diversion of forest land for non-forest purposes; removal of weeds; soil conservation measures; preservation of trees outside the forests etc. The Preservation of Trees Act, 1984 and the Forest Conservation Act, 1980 are the two major enactments enforced in the conservation of forests. The audit findings in this regard are discussed below:

2.1.10.1 Preservation of Trees Act, 1984

The Goa, Daman and Diu Preservation of Trees Act, 1984 (GDDPTA) is an important legislation of the State for preservation of trees outside the forest. As per the GDDPTA, no person can fell or dispose of any tree in any land, whether in his ownership or occupancy or otherwise, except with the previous permission of the Tree Officer. Every person granted permission under the Act is bound to plant such number and kind of tree/trees in the area from which the tree/trees is/are felled or disposed of under such permission as may be directed by the Tree Officer. Further, as per the Goa, Daman and Diu Preservation of Trees Rules, 1983 (GDDPTR), a security deposit has to be collected for ensuring the replanting of the tree/trees, which is refunded on re-plantation of the trees stipulated by the Tree Officer. The rules also stipulate that on failure of a permit holder to replant the tree/trees as specified in the permit, the Tree Officer, after issue of notice to the permit holder, would arrange to replant the trees. The GDDPTA further provided that the cost of replanting the trees by the Tree Officer would be recovered from the permit holder by way of adjustment against the security deposit or failing that, by recovery as arrears of land revenue.

(a) Poor enforcement of the Act

For preservation of trees in the State, it was important that the department not only ensured that the permit holders replanted trees as stipulated by the Tree Officer but also ensured the growth of replanted trees. The divisions issued notices to permit holders on their failure to replant the trees. However, there was no data regarding the number of cases to be inspected, the number of actual inspections conducted, the notices issued, cases where trees had been re-planted and its inspection to monitor its growth. Further, no details were available on the action taken in cases of failure to replant trees to ensure proper monitoring in the implementation of the Act. The rules did not provide for any inspections to be conducted to ensure that the trees replanted were growing well nor was the same prescribed by the department. Audit scrutiny of 744 out of 1,253 cases of tree-cutting permitted during 2009-10 in the office of the DCF, South Division revealed that in none of the cases was any notice issued or action taken to replant the trees. Compilation of data by Audit revealed that as against 2.03 lakh trees to be replanted in lieu of 0.59 lakh trees permitted to be cut during the period 2005-11 in North and South Divisions, only nine thousand trees were replanted. Thus the provisions of the Act pertaining to replanting of trees were poorly enforced. During the exit conference, the APCCF stated (August 2011) that notices were being issued and further action would be taken for enforcement of the Act.

(b) Non-constitution of Tree Authority

Section 3 of the GDDPTA stipulates the constitution of a Tree Authority by the Government for each revenue district, who would be responsible for carrying out census of the existing trees, specifying the standards regarding the number and kind of trees to be planted, the type of land and premises for each locality; the type of species and number of trees to be planted etc. Further, as per Section 11 of the Act, every owner of land should plant trees in “blank areas” so as to conform to the standards specified by the Tree Authority. The DCF, South Division stated (June 2011) that the Tree Authority had not been constituted nor the census conducted and that the matter regarding constituting the Tree Authority

would be initiated. The DCFs, North and South Divisions stated (June 2011) that the details of 'blank areas' were not available with them. During the exit conference, the APCCF stated (August 2011) that the matter was discussed and the Government had directed the department to send a proposal for constituting the Tree Authority. Despite a passage of 27 years from the date the GDDPTA was enacted, the Government had not constituted a Tree Authority, in the absence of which, the work of conducting a census of the trees and specifying standards regarding the number and kind of trees to be planted in each locality, could not be started. A planned approach to preservation of trees thus was absent.

(c) Short recovery of security deposits

As per the GDDPTR, a security deposit has to be collected for ensuring the replanting of tree/trees. As per the relevant Government notification (July 2003), the fee for each tree permitted to be cut was ₹ 100 while the security deposit for ensuring re-plantation of the tree/trees mentioned in the permit in lieu of tree/trees permitted to be cut was ₹ 200 per tree to be replanted. Scrutiny in Audit revealed that security deposits at the rate of ₹200 per tree were collected for the number of tree/trees permitted to be cut instead of the number of trees required to be replanted. As against ₹ 4.06 crore to be collected for ₹ 2.03 lakh trees to be replanted, the security deposit collected was ₹ 1.18 crore only, resulting in short recovery of ₹ 2.88 crore during the period 2005-11 in the offices of the DCFs, North and South Divisions. The DCF, North Division stated (June 2011) that the Government notification had been interpreted to mean that security deposit should be collected for each tree to be felled while the DCF, South Division stated (June 2011) that the Government notification was not clear as to whether the security deposit was to be collected on the trees permitted to be cut or the number of trees to be replanted. The replies are not acceptable since there was no ambiguity in the notification and the security deposit was to be collected for the trees to be replanted. During the exit conference, the APCCF stated (August 2011) that the matter would be re-examined.

(d) Absence of physical verification of security deposits

Security deposits of ₹ 200 per tree were collected by way of Fixed Deposit Receipts (FDRs)/Deposit at Call Receipts (DCRs) and Demand Drafts (DDs). Physical verification of the FDRs/DCRs/DDs held as security deposits was not done during the period 2005-11. Though the security deposits received were noted in a register by the divisions, the date of expiry of DDs were not noted in the register to ensure that the DDs were either renewed or encashed before expiry of the validity of the drafts. Test check of 744 tree-cutting permissions granted during 2009-10 in the office of the DCF, South Division revealed that in 572 cases, DDs valuing ₹ 3.13 lakh had expired. In view of the above, a review of the system being followed in the collection and holding of the security deposits in the form of FDRs/DCRs/DDs without depositing the same into the treasury was required. The DCFs, North and South Divisions stated (June 2011) that the matter regarding the review of the system would be taken up with the higher authorities. During the exit conference, the APCCF stated (August 2011) that necessary action would be taken and the system would be reviewed.

2.1.10.2 Compliance of the Forest Conservation Act, 1980

The objective of the Forest Conservation Act (FCA), 1980, a Central Act is to regulate the indiscriminate diversion of forest land for non-forest uses and to maintain a logical balance between the developmental needs of the country and the conservation of the natural environment. Under the provisions of this Act, prior approval of the Government of India (GOI) is essential for diversion of forest land for non-forest purposes. To reduce environmental damage on account of forest loss, GOI, while approving a proposal, stipulated conditions which, inter alia included carrying out compensatory afforestation, creation of safety zones etc. The cost of conservation measures was to be borne by the user agencies. Further, user agencies had to pay the net present value (NPV) of the diverted forest land. While processing proposals involving diversion of forest land, it was the responsibility of the department to ensure compliance of the conditions laid down by GOI and the State Government. Audit scrutiny revealed the following:

(a) Non-revision of Compensatory Afforestation charges

Compensatory Afforestation (CA) charges were being levied on user agencies for diversion of forest land for non-forest purposes. Charges of ₹ 44,430 per hectare were revised (October 2005) by the State Government retrospectively from August 2004 to ₹ 92,368 per hectare due to increase in daily wages. The daily wage rate increased from ₹ 98 per worker per day in 2002 to ₹ 147 and ₹ 221 per worker per day in June 2007 and 2010 respectively. Considering the increase in wages, the cost of afforestation worked out to ₹ 1,28,927 and ₹ 1,84,138 per hectare with effect from June 2007 and June 2010 respectively. However, the rate of CA charges remained unrevised despite 125.51 *per cent* increase in the daily wage rate from 2002. The CA charges necessitated revision due to increase in wage rate as wages comprised the major cost component of afforestation. During the exit conference, the APCCF agreed (August 2011) to increase the CA charges immediately on revision of the wage rates.

(b) Non-recovery and short recovery of Compensatory Afforestation charges

The FCA stipulated that wherever non-forest land was not available or the area of the non-forest land was less than the forest area being diverted, CA was to be carried out in degraded forests in twice the area being diverted or in an area equal to the difference between the forest land being diverted and the available non-forest land, as the case may be. Scrutiny in audit revealed that the DCF, North Division did not recover CA charges amounting to ₹ 15.59 lakh in a case⁵ involving diversion of 8.44 hectares of forest land for mining. In another case⁶, the DCF, North Division did not recover CA charges for twice the area of 44.07 hectares diverted for mining, resulting in short recovery of ₹ 40.71 lakh. The DCF, North Division intimated (November 2010) the Conservator of Forests (CF) that GOI, while granting in-principle approval for diversion of forest land for mining, had not stipulated recovery of CA and requested the CF to intimate GOI to impose the condition at the time of grant of final approval. However, this fact was not brought to the notice of GOI by the CF. Thus, though the FCA stipulated recovery of CA charges, the same was not done. During the exit conference, the APCCF directed (August 2011) the division to verify the matter and take action.

(c) Non-verification of safety zone area and non-recovery of cost of fencing and afforestation

GOI, while granting in-principle approval for diversion of forest areas for mining purposes, inter alia, stipulated (May 2006) that fencing, protection and regeneration of safety zone areas (7.5 metre strips all along the boundary of mining lease areas) wherever feasible, should be done at the cost of the mine owners. Further, GOI also stipulated (May 2006) that afforestation on degraded forest land should be done in other areas measuring one and a half times the areas under safety zones. This is also to be done at the cost of the mine owners. For carrying out the work of fencing and afforestation, the department recovers the cost from the mine owners. On test check of 10 out of 16 cases approved by GOI during 2006-11, it was observed in audit that the area of the safety zone computed by mine owners was not independently verified by the DCF, North Division. The DCF, North Division stated (June 2011) that the verification of safety zone areas would be considered in future but the reply was silent on the reasons for not verifying the area in the past. recovered the cost of fencing and afforestation. The DCF, South Division had not recovered the cost in three cases. The DCF, North Division stated (June 2011) that the mine was surrounded by other working mines on all sides and that the responsibility of fencing was the user agencies' and not of the department. The reply is not acceptable as in other cases, afforestation charges and cost of fencing have been recovered by the division. The DCF, South Division stated (June 2011) that the details in respect of the three mines were being verified and would be intimated to Audit. During the exit conference, the APCCF directed (August 2011) the divisions to take suitable action and also to verify the recovery cases pointed out by Audit.

(d) Shortfall in Compensatory Afforestation (CA)

In order to mitigate the adverse effects of diversion of green forest land, GOI, while granting approval under the Act, stipulates that CA should be done over an equivalent area of non-forest land or double the degraded forest land in case of non-availability of non-forest land. Quarterly progress reports on CA, in lieu of forest areas diverted under FCA were to be submitted by the DCFs, North and South Divisions to the APCCF's office. Scrutiny revealed that the reports had not been prepared after March 2010 and June 2009 by the DCFs, North and South Divisions respectively. As per the last quarterly progress report submitted by the DCF, North Division, as against CA of 1,440.97 hectares to be done since 1983, only 509.59 hectares (35 *per cent*) had been brought under afforestation. As per the information furnished by the DCF, South Division, CA of 816.86 hectares (82 *per cent*) was done as against 998.92 hectares to be done since 1987. The DCFs, North and South Divisions stated (June 2011) that the shortfalls were due to non-availability of degraded forest land. The reply is not acceptable as even during 2010-11, the department had carried out enrichment plantations in 150 hectares in degraded forests. During the exit conference, the APCCF while agreeing (August 2011) that enrichment plantation in degraded forests was done during 2010-11, also agreed to update data on CA and obtain monthly reports from the divisions.

(e) Non-recovery of penal CA charges from mines

As per a Supreme Court judgement dated 4 January 2008 in the case of Godavarman Thirumulpad vs Union of India (Writ Petition No. 202/1995), penal CA was to be recovered from mine owners for carrying out mining between 1987 and the date on which the approval under FCA was accorded. Accordingly, the DCF, South Division demanded (January 2008) payment of penal CA charges amounting to ₹ 3.70 crore from M/s V.S. Dempo and Company Private Limited in respect of three* mines. However,

the company did not pay the penal CA on the ground that it did not carry out any mining division office, however, did not verify the claim of non-working of the mines. On this being pointed out by Audit, the DCF, South Division stated (June 2011) that the matter had since been referred (June 2011) to the Director of Mines and further progress would be intimated to Audit. The fact remains that the division office did not verify the claim of non-working of mines based on the inspections carried out by the staff and officers of the department. During the exit conference, the APCCF agreed (August 2011) to take action.

(f) Non-monitoring of compliance of conditions stipulated by GOI

While granting permission for diversion of forest land for mining, the GOI conditions include fencing, mitigative measures to minimize soil erosion, etc. Test check of 24 out of 26 cases approved during 2006-11 by Audit in the DCFs, North and South Divisions revealed that periodical inspections of mines were not done to ensure compliance to GOI conditions. Control registers were not maintained showing the position of compliance by mine owners and follow up action by the divisions in cases of default. The department also did not prescribe any periodical reports from Range Offices on the status of compliance of GOI conditions. The division offices had also not prescribed the number of non-working mines to be inspected each month/quarter by the Range Offices and the reports to be submitted therein. In reply, the DCFs, North and South Divisions stated (June 2011) that regular inspections were carried out by the staff and officers of the department in forest areas including mining areas. The reply is not acceptable in the absence of periodical reports on compliance and corrective action taken in the event of mine owners not adhering to the statutory conditions. During the exit conference, the APCCF directed (August 2011) the divisions to maintain control registers and obtain reports from Range Offices to monitor compliance.

2.1.10.3 State Compensatory Afforestation Fund Management and Planning Authority

The MoEF, GOI issued (July 2009) guidelines for establishment of a Compensatory Afforestation Fund Management and Planning Authority (CAMPA) in the State. The functions of the State CAMPA, inter alia, included funding, overseeing and promoting CAs in lieu of diversion of forest land for non-forestry use, overseeing forest and wildlife conservation and protection work within forest areas and maintaining a separate account in respect of the funds received for conservation and protection of protected areas. The amounts towards CA, NPV etc. received from user agencies for diversion of forest land for non-forest purposes were transferred to CAMPA under MoEF, New Delhi. The State CAMPA (constituted in July 2006) received amounts of ₹ 12.12 crore and ₹ 10.24 crore in August 2009 and October 2010 respectively from the CAMPA. Based on the guidelines issued by GOI, the State Government constituted (January 2010) three committees for the functioning of the State CAMPA viz. the Governing Body, the Steering Committee and the Executive Committee. Audit noticed the following deficiencies:

- The Steering Committee approved (March 2010) the Annual Plan of Operations for the year 2010-11 for an amount of ₹ 11.92 crore, as against which the expenditure incurred was ₹ 4.20 crore only. The shortfall was mainly on account of non-utilisation of funds provided for office

accommodation, construction of barbed wire, rubble wall etc. The reasons for shortfall were awaited from the department.

- The Governing Body prescribed maintenance of records relating to CAMPA along with vouchers and ledgers in the divisional offices. Audit scrutiny revealed that neither were ledgers maintained nor were accounts prepared as per the commercial accounting procedure. Monthly progress reports were not submitted as required. No action was also taken by the APCCF's office on non-receipt of reports. Consequently, no monthly CAMPA account could be prepared by the APCCF's office.
- As per the Manual of Guidelines and Accounting Procedure, approved (September 2010) by the Governing Body, the accounts at the division level were to be audited by approved Chartered Accountants on the panel of the Comptroller and Auditor General of India at the end of the financial year, who were to issue certificates before the end of May of the next financial year. Further, as per the Manual, the CCF was responsible for conducting internal audit of accounts of the divisions and preparation of Annual Scheme Completion Reports. Audit observed that the department had neither conducted any internal audit nor prepared any Annual Scheme Completion Report till date (July 2011). During the exit conference, the APCCF stated (August 2011) that the matter regarding audit of accounts would be put up to the Steering Committee.
- As per the Manual, the estimates of works approved in the Annual Plan of Operations were to be prepared following the approved Forest Schedule of Rates or the PWD Schedule of Rates. However, Audit observed that in violation of the approved guidelines, the estimates for afforestation under the State CAMPA were prepared as per the cost estimates for recovery of CA charges from user agencies. During the exit conference, the APCCF stated (August 2011) that the matter pointed out in audit would be examined and action taken accordingly. As per the guidelines of State CAMPA issued (July 2009) by GOI, an independent system for concurrent monitoring and evaluation of the works implemented in the States should be evolved and implemented to ensure effective and proper utilization of funds. It was noticed that the department had not conducted monitoring and evaluation of the works implemented under CAMPA.

2.1.10.4 Under-utilisation of funds of 'Management Action Plan on Mangroves'

MoEF launched the scheme of 'Management Action Plan on Mangroves' in 1987. The mangroves of Goa were identified for intensive conservation and ecosystems found along the coast. They perform a vital role in nutrient recycling, coastal protection and fish breeding. Hundred *per cent* Central assistance was given for undertaking activities such as raising of mangrove plantations, protection, siltation control of coastal areas, etc. Funds were to be released in two installments. The second installment pertaining to the balance grant was to be released to the extent admissible after receipt of an utilization certificate and a report on the physical progress of work done against the released amount. In April every year, MoEF called for a proposal from the State Government for assistance under the scheme. The details of

amounts sanctioned, released by MoEF, spent and the closing balances during the period 2006-07 to 2010-11 were as given in **Table 4** below:-

Table 4
Statement showing grants released, utilized and closing balance in respect of the scheme of 'Management Action Plan on Mangroves'

(₹ in lakh)							
Year	Opening balance	Proposal amount	Amount sanctioned	Amount released	Total	Amount spent	Closing balance
1	2	3	4	5	6 (2+5)	7	8 (6-7)
2006-07	8.50	18.14	12.16	3.66	12.16	8.24	3.92
2007-08	3.92	13.16	9.12	5.20	9.12	7.47	1.65
2008-09	1.65	17.60	16.60	14.95	16.60	6.20	10.40
2009-10	10.40	12.37	10.40	Nil	10.40	7.85	2.55
2010-11	2.55	16.82	Nil	Nil	2.55	Nil	2.55
Total		78.09	48.28	23.81		29.76	

Source: GOI sanction/release orders and utilizations/expenditure statement)

As seen from the above table, proposals for assistance amounting to ₹ 78.09 lakh were submitted to the MoEF during 2006-11. Against this, ₹48.28 lakh (62 per cent) was sanctioned but only ₹ 23.81 lakh, being the first instalment, was released (49 per cent). However, a total expenditure of ₹ 29.76 lakh was incurred during the period, leaving an unspent balance of ₹ 2.55 lakh. No amount was released during 2009-10 and 2010-11 as the department had an unspent balance of ₹ 10.40 lakh as on April 2009 and ₹ 2.55 lakh as on April 2010. Due to non-submission of utilisation certificates and reports on physical progress of work, the department lost ₹ 24.47 lakh during 2006-10 for taking up works to protect the mangroves responsible for the protection of the eco-system. Against the physical targets of 210.50 hectares and 155.00 hectares for mangrove plantations and enrichment respectively for the years 2006-07 to 2009-10, the achievement were only 168.50 hectares and 102 hectares (270.50 hectares) respectively, indicating a shortfall of 21 per cent. Similarly, as against ₹ 10 lakh provided for a Mangrove Park at Panaji during 2006-07 to 2009-10, there was no progress even in acquiring land for the purpose. Further, for protection of mangroves and creating awareness, expenditure of only ₹ 44 thousand and ₹ 57 thousand was incurred during 2006-10 against ₹ 1.94 lakh and ₹ 2.90 lakh respectively, provided under the scheme. The sanction order of the MoEF required that an impartial outside technical agency be selected for evaluation of the progress of the work. The selection of the outside technical agency was not done by the department. The DCF, Research & Utilisation (R&U) replied (June 2011) that late receipt of funds was responsible for non-achievement of targets. Further, it was stated that the PWD was still to hand over one hectare of land for the Mangrove Park. The reply is not acceptable, as the department had unutilized funds from the previous years for carrying out the works and did not have to wait for fresh funds from MoEF.

2.1.11 Development of Forests

The Forest Department, as a custodian of Government forest land, performs a number of developmental functions. Raising/maintenance of plantations, urban/social forestry, construction and maintenance of buildings and roads in forest areas, supply of timber and development of habitats are some of the important developmental functions of the department. The Government constituted three Forest Development Agencies for development of the forests through people's participatory approach.

2.1.11.1 National Afforestation Programme

The National Afforestation Programme (NAP), introduced in the Xth Five Year Plan, was a 100 per cent Centrally Sponsored Scheme operated by the National Afforestation and Eco Development Board (NAEB) under MoEF. The objectives of the scheme included (i) protection and conservation of natural resources through active involvement of the people (ii) checking of land degradation, deforestation and loss of bio-diversity (iii) ecological restoration, environmental conservation and eco-development and (iv) evolving of village level people's organizations which could manage the natural resources in and around the villages in a sustainable manner. Forest Development Agencies (FDAs) and Joint Forest Management Committees (JFMCs) were the nodal agencies for implementation of the scheme. Audit findings with regard to the implementation of this scheme were as follows:-

(a) Delay in utilization of funds provided

Three FDAs were constituted (July 2003), namely for Wildlife, North and South while the JFMCs were notified in March 2003. Proposals from the three FDAs covering an area of 1,250 hectares were sent (October 2003) involving an amount of ₹4.07 crore for the period 2003-04 to 2006-07. However, the MoEF sanctioned only ₹ 2.39 crore for the period 2003-04 to 2006-07, out of which an amount of ₹ 64 lakh was released (March 2004) for the year 2003-04. The details of the areas, amounts proposed, amounts sanctioned for the period 2003-04 to 2006-07, amounts released for 2003-04 and expenditure incurred as of March 2011 by each of the three FDAs were as given in **Table 5** below:-

Table 5
Statement showing grants released, utilized and closing balance

(₹ in lakh)							
FDA	Proposed area for 2003-07 (in hectares)	Proposed amount for 2003-07	Number of JFMCs	Amount sanctioned by MoEF for 2003-07	Amount released by MoEF for 2003-04	Expenditure incurred during 2003-11	Unspent balance
North	450	146.55	11	86.19	23.00	5.26	17.74
South	375	121.96	7	71.87	19.00	11.53	7.47
Wildlife	425	138.52	8	81.15	21.00	16.00	22.00
Total	1250	406.53	26	239.21	64.90	36.79	47.21

(Source: GOI sanction/release orders and utilization/expenditure statement)

An amount of only ₹ 16.79 lakh could be spent during the period 2003-04 to 2010-11, out of the ₹ 64 lakh released for 2003-04. Scrutiny revealed that micro-plans for each JFMC were required to be prepared by the FDAs in consultation with members of these committees, and thereafter the consolidated project proposal for the FDA should have been finalized, approved and submitted to GOI for release of funds. This was not done. The plans/maps of areas identified for plantations were not available in the North and South FDAs, as the proposals were finalized without actually identifying the areas in the field and without preparing maps for the identified areas. Further, as the project was mainly plantation based, the same could not be implemented in FDA (Wildlife) due to lack of adequate land for afforestation. Moreover, the benefit of the plantation could not be shared with the locals as no forest

produce was permitted to be harvested from wildlife protected areas. MoEF had directed the department in May 2006, October 2009 and October 2010 to return the unspent amount of ₹ 47.21 lakh along with interest. The State Government also conveyed (May 2011) its approval for returning the unspent amount. Non-utilisation of ₹47.21 lakh out of ₹ 64 lakh released further resulted in depriving the State of the balance amount of ₹ 1.75 crore sanctioned.

(b) Non-release of funds to JFMCs

As per the sanction order of the MoEF, the FDAs were to release the amount to the JFMCs within 15 days of receipt of funds from the MoEF based on their fund requirements. Further, the accounts of FDAs were to be audited through reputed Chartered Accountants on the panel of the Comptroller and Auditor General of India. Though 26 JFMCs were constituted, no amounts were released to these JFMCs. Further, no audit of the accounts of the FDAs had been conducted as required in the sanction orders. As per the guidelines of MoEF, a State Level Steering Committee was to be constituted for monitoring the implementation of the scheme. Though the committee was constituted (March 2008) after a delay of about five years, no the committee and holding of meetings were not furnished (August 2011). The DCF, South Division replied (June 2011) that the scheme did not provide sufficient flexibility for implementing in Goa. The reply is not acceptable as proposals under the scheme were prepared by the concerned FDAs without any planning and without consulting the members of the JFMCs. Further details about whether land was available for plantation were not ascertained at the time of preparation of plans as no maps were available.

2.1.11.2 Delay in utilization of funds under Integrated Development of Wildlife Habitats

The MoEF (Wildlife Division) was implementing since 2005-06, a Centrally Sponsored Scheme 'Assistance for Development of Wildlife Sanctuaries and National Parks', which was renamed (January 2009) 'Integrated Development of Wildlife Habitats'. The scheme was to provide assistance for development of sanctuaries and national parks and also aimed at protection of wildlife outside protected areas and conducting recovery programmes for critically endangered species and habitats. The scheme was to be funded both by the Central and State Government on 75:25 basis. Funds were to be released in two instalments in a financial year. The second instalment was to be released only after receipt of progress of expenditure along with an utilization certificate for more than 50 *per cent* of the first instalment of the year. While proposals for the scheme were invited by MoEF (Wildlife Division) in April every year with tentative allocations and were to be submitted latest by April-May of the year, the proposals for funds were actually submitted between July and October, after delays of 71 to 139 days. This led to subsequent delays in sanction and receipt of funds from MoEF and their utilization. The details of amounts lying unspent at the beginning of the year, amount sanctioned, released and spent during the period 2006-07 to 2010-11 was as given in **Table 6** :-

Table 6
Statement showing grants released, utilized and closing balances

(₹ in lakh)

Year	Opening balance	Amount sanctioned	Amount released	Total amount available	Amount spent	Closing balance
1	2	3	4	5 (2+4)	6	7 (5-6)
2006-07	47.14	47.88	5.00	52.14	17.76	34.38
2007-08	34.38	57.96	31.59	65.97	45.88	20.09
2008-09	20.09	77.52	41.94	62.03	59.01	3.02
2009-10	3.02	92.56	71.03	74.05	41.49	32.56
2010-11	32.56	59.70	32.87	65.43	32.42	33.01
Total		335.62	182.43		196.56	

(Source: GOI sanction/release orders and utilization/expenditure statement)

An amount of ₹ 47.14 lakh was lying unspent as on 1 April 2006. During 2006-11, an amount of ₹ 3.36 crore was sanctioned, out of which only ₹ 1.82 crore (54 per cent), being the first instalment for the year was released. The department could, however, spend only ₹ 1.97 crore during 2006-07 to 2010-11, leaving an unspent balance of ₹ 33.01 lakh as on 31 March 2011. The State was deprived of the second instalment of ₹ 1.54 crore as the department failed to submit utilization certificates for utilization of 50 per cent of the first instalment. The DCF, (P&S) replied (June 2011) that the process of preparation of proposals was time-consuming and attributed the delay in utilization of funds to considerable time spent in observing the codal formalities. The reasons for delay in preparation of proposals are not acceptable as this process could have been started well in advance as it was an ongoing scheme.

2.1.11.3 Unoperational Tissue Culture Laboratory

A Tissue Culture Laboratory (TCL) for the State of Goa was set up (2002) with the objectives of overcoming the problems of traditional methods of propagation as also production of large number of quality seedlings after selecting the desirable traits. The laboratory was well equipped with equipment costing ₹ 4.04 lakh purchased during 2000-01, 2003-04 and 2009-10. Three officials of the department were trained between September 2008 and December 2009 at the Institute of Wood Sciences and Technology, (IWST) Bangalore. Despite the training provided and equipment purchased, the TCL was not operational (March 2011). The DCF, (P&S) replied (June 2011) that qualified researchers were required to run the laboratory and that the trained officials could only assist the researchers and handle the TCL for a short period. The reply is not acceptable as the department never approached the Government for creation of posts of researchers in the department. The benefit which would accrue to the plantations as a result of the research thus failed to materialize due to the laboratory remaining unoperational even after eight years. During the exit conference, the APCCF stated (August 2011) that the trained people would be put on the job to look after the TCL.

2.1.11.4 Failure of plantations carried out in Comunidade land

The Social Forestry Division carries out various activities such as plantation/afforestation in Comunidade land, avenue plantation, raising of nurseries, creation and maintenance of gardens etc.

The division had executed 40 lease agreements with different Comunidades all over Goa between 1986 and 2007, involving 2,907.21 hectares of land for taking up plantations therein. Audit scrutiny revealed that the register maintained by the division showed that the number of agreements entered into were 59 involving 3,106.98 hectares while the actual number of agreements was only 40 involving 2,907.21 hectares as seen from reply of the division. Further, details of plantations carried out in these lands were not entered in the register or were not readily available with the division. Details of renewal of seven agreements with the Comunidades which expired between 1991 and 2011 were not available. Test check of files of the six Comunidade lands taken up for plantations revealed that plantations were either not taken up fully or were not successful as detailed below:-

- Against 22.22 hectares of Assagao Comunidade land taken on lease in July 2007, plantations in only 4.46 hectares and 5.54 hectares were taken up in 2006-07 and 2007-08 respectively. Plantation in the balance 12.22 hectares was not taken up due to dense vegetation cover and objections to carry out plantation by tenants.
- An area of 56.07 hectares of land of the Rivona comunidade was taken on lease in July 1999. Plantation of 89,600 seedlings in 25 hectares was done in 1999-2000 at a cost of ₹ 2.73 lakh. Maintenance of the plantation was carried out at a cost of ₹ 4.46 lakh during the period 2000-01 to 2002-03. However, only 1,787 trees were available as on August 2009, denoting heavy casualties. Further, re-plantation in 10 hectares was carried out in 2010-11 i.e., after a gap of 10 years as the Comunidade requested (August 2008) the department to return the land since no activities were seen there. Plantation in the balance 31.07 hectares was still to be taken up. Scrutiny in audit revealed that the failure of the plantations was due to the presence of a lot of laterite stone quarries and the absence of good surface soil.
- Two pieces of land measuring 74 and 61 hectares were taken from the Curtorim Comunidade vide agreements in June 1991 and December 1991 respectively. Plantations were carried out in 37.14 hectares of land in 1991-92 with 97,995 seedlings at a cost of ₹ 1.26 lakh. Despite maintenance for four years at a cost of ₹ 0.97 lakh, the plantation was a total failure. The failure of the plantation was attributed to existence of laterite stone quarries. The balance area of 97.86 hectares was not taken up for plantation despite the lapse of over nine years.

Taking up Comunidade land without proper surveys in respect of soil, quarries, tenant problems, etc. resulted in the Social Forestry Division either not being able to carry out plantations or poor survival rates in the plantations carried out resulting in wasteful expenditure of ₹ 9.42 lakh in respect of the above three plantations.

2.1.11.5 Sanction of estimates after commencement or completion of work and non-preparation of work completion reports

Para 13.4.5 of the Goa, Daman and Diu Forest Code (GDDFC) stipulates that normally no work should be executed or started for which there is neither a sanction nor provision of funds. Para 13.3.1 of GDDFC stipulates that estimates for different works should be obtained by the sanctioning authority during April every year and sanctioned as early as practicable on receipt of sanctioned appropriation. Para

13.10 of the GDDFC stipulates that on completion of a work, a detailed completion report in the prescribed form should be prepared. The completion report should give complete details of the quantity, rate and amount of each item actually executed, as entered in the sanctioned estimate. Test check of the 656 estimates sanctioned for an amount of ₹ 6.07 crore during 2008-11 in seven* divisions for various works like raising of plantations, maintenance of plantations etc. revealed that 460 estimates (70.12 *per cent*) amounting to ₹ 4.65 crore were sanctioned after commencement of work. Analysis by Audit revealed that out of 656 estimates, 84 estimates (12.80 *per cent*) amounting to ₹ 82.39 lakh were prepared after completion of the works, indicating lack of planning in the execution of works apart from failure to observe the codal provisions. Further, work completion reports were not prepared in respect of any of the 656 estimates. During the exit conference, the APCCF stated (August 2011) that action was being taken to get the estimates sanctioned prior to the commencement of work and preparation of work completion reports.

2.1.11.6 Forest Training School

The Forest Training School at Valpoi with a capacity of training 25 students had been functioning since 1982. The training school had operated below the sanctioned staff strength between 2006 and 2011. As against a sanctioned strength of six (one Principal, two Instructors, two Assistant Instructors and one Games/PT Instructor) only two were in position during 2006-07 and 2007-08, three in 2008-09, four in 2009-10 and five in 2010-11. Further, the syllabus covered was introduced in 1982. As the forestry sector was facing a number of new challenges and the efficiency and effectiveness of the Forest Department depended much on the performance level of these officials, the MoEF furnished (September 2009) guidelines for the revision of the syllabus. The revised syllabus covered topics such as joint forest management and people participatory activities related subjects covering stake-holders, micro planning, participatory skills, community based organization etc. which were not covered in the earlier syllabus. Despite the passing out of one batch in January 2011 and the next batch having commenced training from February 2011, the required changes in the syllabus had not been carried out. The DCF, (R&U) replied (June 2011) that the available staff and some personnel from the Goa Forest Development Corporation were deployed to carry out the duties of instructor and that the process of revision of the syllabus was under scrutiny. During the exit conference, the APCCF stated (August 2011) that action was being taken for revision of the syllabus.

2.1.12 Monitoring and Evaluation

2.1.12.1 Decrease in forest cover

The National Forest Policy, 1988 set a goal of bringing one-third of the country's area under forest cover or tree cover. As per the India State of Forest Report 2009, issued by the Forest Survey of India, the total forest and tree cover of Goa was 65.83 *per cent* of the total geographical area of the State as against the national forest and tree coverage of 23.84 *per cent*. Further, the above Report also indicated the decrease in the State's forest cover in the State by five sq km based on the satellite data of January 2007 as compared to satellite data of December 2004. The decrease was two and three sq km in moderately dense forests and open forests respectively. The main reason given in the report for the decrease was

the loss in Tree Outside Forest (TOF). The loss in the TOF was attributed (June 2011) by DCF, (Planning and Statistics) to pressure for land for housing, road networks and other developmental purposes besides mining, which was one of the major economic activities of the State. It was further stated that to keep a check on tree felling on private land, the Preservation of Trees Act was enacted in 1984 to regulate the felling of trees outside forest areas. Audit observed that the provisions under the Preservation of Trees Act were not being stringently enforced as discussed earlier in para 1.1.10.1. During the exit conference, the APCCF stated (August 2011) that the provisions of the Act would be stringently enforced.

2.1.12.2 *Inspections of Plantation and Survival Reports*

As per para 9.3.5 of the Goa, Daman and Diu Forest Code 1979, (GDDFC), whenever plantations are raised, plantation journals should be maintained to record the various operations. Further, as per para 8.1.3 of GDDFC, the Divisional Forest Officer is required to inspect regeneration areas, frequently during pre-planting, planting and post-planting operations. Conducting regular inspections of regeneration areas and preparation of survival reports facilitate prompt action to be taken to ensure the growth and development of plantations. Scrutiny of the 162 plantation journals maintained in 14 Range offices in three Divisions (DCF North, DCF South and DCF (R & U)) for the period 2006-11, involving plantation of 17.96 lakh# plants with an expenditure of ₹ 4.83 crore revealed that plant survival reports were not available in 143 cases (88 *per cent*) involving plantation of 15.78 lakh# plants and expenditure of ₹ 4.18 crore. Plantation journals were not maintained in respect of 15 plantations carried out during 2008-11 by the DCF, Wildlife and Eco-Tourism Division, involving an expenditure of ₹ 14.83 lakh. Inspections were not carried out in respect of 89 cases (55 *per cent*) involving plantations of 8.29 lakh# plants and expenditure of ₹ 2.12 crore. As against 379 inspections to be conducted (one during plantation and one each during the two-year maintenance period) in respect of 162 plantations, only 86 inspections were conducted, resulting in a shortfall of 77.31 *per cent*. In 18 plantations, involving expenditure of ₹ 31.95 lakh, maintenance was not done in 10 plantations while in eight plantations, maintenance was done only for one year. Plantation maps showing the location of plantations, were not available in 10 plantation journals of DCF, South Division. In the absence of survival reports and shortfalls in inspections, remedial measures that were required could not be taken up for preventing further degradation of forests. During the exit conference, the APCCF stated (August 2011) that survival reports would be prepared and inspections improved and recorded in the plantation journals.

2.1.13 *Internal Control*

Every department is required to institute appropriate internal controls for its efficient and effective functioning by ensuring the enforcement of rules and departmental instructions. Internal control helps in creation of reliable financial and management information systems for prompt and efficient services and adequate safeguards against deviations from organizational goals and objectives.

2.1.13.1 *Non-conducting of internal audit and inspections*

Internal audit is a vital component of the internal control mechanism which enables an organisation to assure itself that the prescribed systems are functioning reasonably well. As per para 3.3.4 of GDDFC,

the Assistant Accounts Officer should conduct internal audit of the accounts of the head office and inspection of the accounts of subordinate offices. Scrutiny by Audit in the office of the Additional Principal Chief Conservator of Forests revealed that no records were available regarding the period up to which internal audit and inspections of the subordinate offices were conducted. It was further observed in Audit that the department did not have any internal audit manual, prescribing the extent of checks to be exercised and periodicity of audit. During the exit conference, the APCCF stated (August 2011) that internal audit of the divisions had been completed and that an internal audit manual and check lists would be prepared.

2.1.13.2 Non-maintenance of records

As per para 12 of GDDFC, the divisions and Range Offices are to maintain registers of buildings, lands, roads, leases, rent and ground rent to keep watch of its properties and timely recovery of rents. It was observed that the registers of rent and the registers of lease and ground rent were not maintained in the offices of the DCFs, North and South Divisions while the register of roads was not maintained in the office of the DCF, South Division. The DCFs, North and South Divisions were not maintaining compartment history showing the areas, boundaries, soil conditions, composition of species, age class quality of stocks, stocking densities etc. Consequently, the plantations done from time to time in each compartment were also not recorded. As per para 9 of the GDDFC, the divisional offices had to maintain Divisional Forest Journals while Range Offices were to maintain Forest Range Manuals. It was noticed in audit that these journals were not maintained by DCF, South Division and all the Range Offices under it. Further, range forest reference maps, plantation key maps and maps of each beat were also not maintained by DCF, South Division and all the Range Offices under it. The DCF, South Division stated (June 2011) that a thorough review of record maintenance would be done to update the system. During the exit conference, the APCCF stated (August 2011) that necessary instructions would be given to field offices to maintain records.

2.1.13.3 Non-verification of charges recoverable by the Accounts Section

Audit observed that recovery of various charges viz. compensatory afforestation, net present value etc. from user agencies was not being routed through the Accounts Sections of the DCF, North and South Divisions for verification, to prevent mistakes in computation of charges. Implementation of such a process was essential as a part of internal control. During the exit conference, the APCCF stated (August 2011) that necessary instructions would be given to the field offices.

2.1.13.4 Deficiencies in maintenance of cash book

(a) Scrutiny of cash books for the period 2006-11 maintained in seven divisions, 28 Range Offices and the APCCF's office revealed the following deficiencies:

- daily totals of cash books were not made and transactions recorded in the cash books were not attested by the Heads of offices in token of check,
- cash book pages were not numbered,
- surprise verification of cash balances was not carried out,

- certificate regarding number of pages in the cash book was not recorded on the first page of cash book and
- entries in cash books were made on passing of vouchers and not on the basis of actual disbursement of cash.

The APCCF's office, DCF, North Division, DCF, South Division and DCF, R&U Division stated (May/June/July 2011) that necessary action had been taken/was being taken to rectify the omissions pointed by Audit.

2.1.14 Conclusion

Despite a lapse of five years from the time the National Forest Commission recommended formulation of the State Forest Policy, the State had not notified its Forest Policy. The Working Plans in respect of the two territorial divisions were also pending approval of the Government. Management Plans of five Wildlife Sanctuaries and the National Park were not prepared. There was delay in notifying the forest areas thereby hampering the protection of these areas, and its consequent conservation and development. Offence cases registered during 2003-10 under various Acts were pending for want of compliance reports from the Range Forest Offices. The provisions of the Preservation of Trees Act, 1984 pertaining to replanting of trees for conservation of forest were poorly enforced. Further, compliance of the Forest Conservation Act, 1980 was not ensured during diversion of forest land to non forest purposes. Shortfall in compensatory afforestation further hampered the conservation of forest cover in Goa.

2.1.15 Recommendations

- Finalisation of the State Forest Policy, Working Plans and Management Plans should be done in a time-bound manner for effective management of forests.
- A system should be in place to ensure that Compensatory Afforestation charges are revised immediately on increase in wage rate.
- Government should post independent Forest Settlement Officers to expedite forest land settlement proceedings for issue of notifications under Section 20 of the Indian Forest Act, 1927.
- A system should be in place to monitor the offence cases for prompt disposal as also watch the recovery in compounding cases.
- Audit of the accounts of Forest Development Agencies and accounts under CAMPA should be got completed on top priority.
- Effective steps should be taken to utilize the funds sanctioned by the Government of India under the various schemes.
- Independent monitoring and evaluation of works under Compensatory Afforestation and Management Action Plan on Mangroves should be conducted.