

## CHAPTER-II

### PERFORMANCE AUDIT

#### FORESTS AND WILDLIFE DEPARTMENT

## 2. Implementation of the Wildlife (Protection) Act, 1972 in the State

### 2.1 Introduction

The Wildlife (Protection) Act, 1972 (the Act), a Central Act, was enacted for the protection of wild animals, birds and plants and connected matters with a view to ensure the ecological and environmental security of the country. It was enforced in Kerala with effect from 01 June 1973.

The Wildlife wing of the Forests and Wildlife department (Department) came into existence from 01 March 1985 on the direction of the Government of India (GoI) to constitute a separate Wildlife wing to strengthen the wildlife protection and conservation programmes in the State in tune with the first National Wildlife Action Plan of 1983. All Wildlife Sanctuaries (WLS) and National Parks (NP) were brought under the control of the Wildlife wing and separate Wildlife Divisions (WLD) were formed to manage them. There are six NPs, 17 WLS and one Community Reserve in Kerala. The total geographical area of Kerala State is 38,863 sq km, of which forest land constituted 11,309 sq km (29.10 *per cent*). The extent of Protected Areas (PAs)<sup>1</sup> as on 31 March 2017, as claimed by the Department was 3,213 sq km, which constituted 8.27 *per cent* of the total geographical area of the State. PAs consist of the areas notified under the Act as Sanctuaries, NPs, Conservation Reserves and Community Reserves. The PAs notified in the State are as shown in **Appendix-2.1**.

### 2.2 Organisational set-up

The Department is headed by an Additional Chief Secretary to the Government. The organisational set up of the Wildlife wing of the Department is given in **Appendix-2.2**.

### 2.3 Audit Objectives

The Performance Audit seeks to assess:

- (a) whether there was proper and adequate planning for the conservation and protection of wildlife in the State; and
- (b) whether implementation and enforcement measures for wildlife protection were taken in accordance with the Act.

---

<sup>1</sup>Protected Area' means a National Park, a sanctuary, a conservation reserve or a community reserve notified under Sections 18, 35, 36A and 36C of the Act.

## **2.4 Audit criteria**

Audit findings are based on criteria derived from:

- Wildlife (Protection) Act, 1972 (as amended from time to time) and Rules framed thereunder.
- Forest Act, 1961 and Rules framed thereunder.
- Management Plans/Conservation Plans/Working Plans of the Division Offices.
- Government Orders, Notifications, Guidelines, etc.

## **2.5 Audit scope and methodology**

The Performance Audit was conducted from May 2017 to October 2017 covering the period 2012-17. Audit test checked the records of four WLDs<sup>2</sup> out of 10 and six Territorial Divisions<sup>3</sup> out of 25, selected on the basis of Probability Proportional to Size Without Replacement sampling method. In addition to the samples selected, Audit also scrutinised the records of Silent Valley Wildlife Division, Mannarkkad and Social Forestry Division, Thrissur. An entry conference was conducted on 05 July 2017 attended by the Principal Chief Conservator of Forests & Chief Wildlife Warden (PCCF & CWW) and the exit conference held on 20 February 2018.

## **2.6 Audit findings**

### **2.6.1 Planning for conservation and protection of wildlife in the State**

#### **2.6.1.1 Functioning of the State Board for Wildlife**

According to Section 6 (as amended in 2002) of the Act, the State Government shall constitute a State Board for Wildlife (the Board) consisting of 31 members with the Chief Minister as the Chairperson, which shall advise the State Government on various matters related to protection and conservation of wildlife. In terms of Section 7 of the Act, the Board is required to meet at least twice a year.

The Government of Kerala (Government) constituted the Board as required, but the Board did not hold meetings as specified in the Act. Audit observed that during the period 2012-13 to 2016-17, against the requirement of at least 10 meetings only five were held, with no meeting during 2015-16. Non-conduct of meetings by the Board delayed decisions on agenda items based on which the Board was to advise the Government on issues/matters concerning the protection and conservation of wildlife and its habitat.

The Government replied (March 2018) that the delay in convening meetings of the Board was not intentional and that the audit findings are taken note of and corrective action would be taken in future.

---

<sup>2</sup>Periyar East, Periyar West, Wayanad & Idukki.

<sup>3</sup>Konni, Ranni, Vazhachal, Malayattoor, Munnar and Kothamangalam.

### 2.6.1.2 Non-constitution of Advisory Committee

Section 33B<sup>4</sup> of the Act provides for constitution of an Advisory Committee for rendering advice on the measures to be taken for better conservation and management of each sanctuary including participation of the people living within and around the sanctuary. This is not constituted till date (December 2017). Hence, the Government failed to ensure better conservation and management of the sanctuaries through local participation.

The Government replied (March 2018) that the process of formation of an Advisory Committee for each sanctuary was in progress and this would be finalised within a short period.

### 2.6.1.3 Notification of Sanctuaries/National Parks

The State is empowered by the Act to declare its intention to constitute a WLS or NP through a notification under Section 18 and Section 35 respectively. This is to be followed by appointment of a Collector who will determine the rights or claim of persons over the land and finalise the acquisition within a period of two years. After completion of this procedure, a final notification as per Section 26A<sup>5</sup> or 35(4) is to be issued declaring the area as a WLS or NP by specifying the limits and the date of effect, which cannot be altered by the State Government without recommendation of the National Board for Wildlife.

Since 1991, the Government issued intention notifications in respect of three NPs and four Sanctuaries as given in **Table-2.1**.

**Table 2.1: Details of Sanctuaries and National Parks notified since 1991**

Sl No.	Name of the Sanctuary/ National Park	Extent (sq km)	Intention notification issued under section	Date of Notification	Status of land before notification
1	Mangalavanam Bird Sanctuary	0.0270	18(1)	31/08/2004	Purambokke
2	Kurinjalama Sanctuary	32.000	18(1)	06/10/2006	Revenue
3	Choolannur Peafowl Sanctuary	3.420	18(1)	15/05/2007	Vested
4	Malabar Wildlife Sanctuary	74.215	18(1)	05/06/2009	Reserve/Vested
5	Pambadum Shola National Park	1.318	35(1)	23/12/2003	Reserve
6	Anamudi Shola National Park	7.500	35(1)	14/12/2003	Reserve
7	Mathikettan mala National Park	12.817	35(1)	10/10/2003	Cardamom Hill Reserve

<sup>4</sup>The State Government shall constitute an Advisory Committee consisting of the Chief Wildlife Warden or his nominee not below the rank of Conservator of Forests as its head and shall include a member of the State Legislature within whose constituency the sanctuary is situated, three representatives of Panchayati Raj Institutions, two representatives of non-governmental organisations and three individuals active in the field of wildlife conservation, one representative each from departments dealing with Home and Veterinary matters, Honorary Wildlife Warden, if any, and the officer-in-charge of the sanctuary as Member-Secretary.

<sup>5</sup>Section 26A was inserted in the Act through amendment Act in 1991.

Source: Notifications issued by the Government

It was observed in the above-mentioned cases that though eight to 14 years had lapsed since the intention notifications, the final notification under Sections 26A (1)/35(4) was not issued till date (February 2018). As the specific limit and situation of the sanctuary is defined and notified only with the final notification, delay in issue of the final notification may lead to alienation of land from the initially notified area as observed in the case of Kurinjimala<sup>6</sup> Sanctuary.

The Government replied (March 2018) that the delay in final notification was due to resistance from the public and the long process involved in convincing them. Further, it was stated that in the case of two NPs (Pambadum Shola and Anamudi Shola), the area fell within reserve forests and therefore, the intention notification itself could be considered as the final notification.

The reply is not acceptable as Audit observed that even where the land was under the full control of the Department (Mangalavanam Bird Sanctuary), the final notification was pending. In the case of the two NPs, the Government should have directly notified<sup>7</sup> the area as NPs instead of issuing intention notification under Section 35 (1) of the Act.

#### **2.6.1.4 Strengthening and enhancing the protected area network**

National Wildlife Action Plan 2002-16 focused on strengthening and enhancing the PA network in the country by creation of new legal PA categories like Conservation Reserves<sup>8</sup> and Community Reserves<sup>9</sup>. Through these categorisations and by including suitable adjacent habitats and corridors with existing PAs, the National Wildlife Action Plan aimed at bringing 10 *per cent* of India's land mass under the PA network and urged the States to establish new PAs including the proposed Conservation Reserves and Community Reserves, etc.

- The Department reportedly brought 8.27 *per cent* of the land mass under PA network.
- However, Audit observed that the figures reported by the Department included core area of 293.76 sq km added to Periyar (148 sq km) and Parambikulam (145.76 sq km) Tiger reserves; and buffer area of 360.90 sq

---

<sup>6</sup>In the case of Kurinjimala sanctuary, the area notified as per initial notification issued in 2006 was 3200 hectares. In 2009, the Collector (appointed under the provisions of the Act) in order to determine the rights issued a notification excluding an area of 672 hectares (possibly due to encroachments) from the proposed sanctuary without assigning any reason.

<sup>7</sup>Explanation (under section 35 of the Act)—For the purposes of this section, in case of an area, whether within a sanctuary or not, where the rights have been extinguished and the land has become vested in the State Government under any Act or otherwise, such area may be notified by it, by a notification, as a National Park and the proceedings under sections 19 to 26 (both inclusive) and the provisions of sub-sections (3) and (4) of this section shall not apply.

<sup>8</sup>Areas adjacent to National Parks and sanctuaries and those areas which link one protected area with another, declared as a Conservation Reserve for protecting landscapes, seascapes, flora and fauna and their habitat.

<sup>9</sup>Where a community or an individual has volunteered to conserve wildlife and its habitat in private or community land, the State Government may declare such land as a Community Reserve, for protecting fauna, flora and traditional or cultural conservation values and practices.

km added to Parambikulam tiger reserve (212.90 sq km) and Silent Valley National Park (148 sq km), though the same were yet to be notified as sanctuaries. Therefore, an area of 654.66 sq km out of 3,213 sq km claimed by the Department was yet to be notified, reducing the area under PA to 6.58 per cent.

Audit also observed that the forest cover of the state was 11,309 sq km, of which only 2,558 sq km were under the PA network. The Department did not initiate any action to achieve the PA network target by notifying the forest area, which was already under its control. Even the proposal in the Working Plan of Vazhachal Territorial Division to declare certain forest areas as sanctuaries did not progress further. Therefore, there was scope for improvement in achieving the target PA network area envisaged in the National Wildlife Action Plan 2002-16.

The Government replied (March 2018) that the audit finding was taken note of and efforts in this direction would be expedited.

#### **2.6.1.5 Administrative control of new area added to Tiger Reserve**

The Government notified (December 2009) an extent of 390.89 sq km as core and 252.77 sq km as buffer area of Parambikulam Tiger Reserve, which were inclusive of 145.76 sq km and 212.90 sq km respectively of the adjoining Territorial Divisions<sup>10</sup>.

The first Tiger Conservation Plan (TCP) of Parambikulam Tiger Reserve was prepared for the period 2011-21. As stipulated in the TCP, the Field Director (Project Tiger) was to take over the 145.76 sq km area of forest land from the above three Divisions and manage the area as one unit under the administrative control of Deputy Director, Parambikulam Tiger Reserve.

It was observed that:

- The administrative control of the territorial forest area included in the core area was not handed over to the Parambikulam Tiger Reserve. Hence, the management prescriptions<sup>11</sup> provided with regard to protection and conservation of wildlife were limited to the existing forest area of the four<sup>12</sup> ranges of the Parambikulam Tiger Reserve only. There were no specific management prescriptions in respect of weed eradication/*Vayal*<sup>13</sup> maintenance, construction of new water holes, deepening of existing water holes, construction/maintenance of anti-poaching camps etc in the newly added area which negated the very purpose of their being brought under the tiger reserve.
- Similarly, administrative control of the buffer area transferred was not handed over to the Field Director (Project Tiger) even though more than eight years had lapsed since the notification.

<sup>10</sup>Nenmara, Chalakkudi and Vazhachal.

<sup>11</sup>The Department used the word 'prescription' in the Management, Conservation, Working Plans to denote stipulations for future action.

<sup>12</sup>Sugam, Karimala, Parambikulam and Orukomban.

<sup>13</sup>Vayals are low attitude marshy grass lands with perennial availability of water and grass.

The Government replied (March 2018) that the core area of Vazhachal (60.53 sq km) and Chalakkudy (42.24 sq km) was already handed over to Parambikulam Tiger Reserve and that of Nenmara Division (42.99 sq km) was in progress. Further, the area was managed as a tiger reserve as per the prescriptions in the TCP and wildlife management is being carried out in these areas.

The reply is to be viewed against the fact that handing over of the entire core area, which is under the sole control of the Department and where no third party is involved is not yet complete despite more than eight years of the notification. Moreover, the TCP (2011-21) of Parambikulam Tiger Reserve does not include management prescriptions for these areas.

#### **2.6.1.6 Delay in notification of areas as Sanctuary**

The Government added areas of the adjoining Territorial Forest Divisions to the existing sanctuaries and tiger reserves through notifications as either buffer or core area. These areas were, however, not notified as PAs.

An extent of 148 sq km of Ranni Territorial Division was added as core area to the Periyar Tiger Reserve (PTR) during the year 2007. Similarly, an extent of 145.76 sq km<sup>14</sup> of adjoining territorial division was added to the core area of the Parambikulam Tiger Reserve during the year 2009. Further, an extent of 148 sq km was added (June 2007) to the Silent Valley National Park as buffer. Though the State Board in its meeting held on 30 November 2010 recommended declaring the above areas as WLS, the same did not materialise.

The Working Plan<sup>15</sup> of each Division, prepared for a period of 10 years, is approved by the Ministry of Environment, Forest and Climate Change (MoEF & CC). It was proposed in the Working Plan (2002-12) of the Vazhachal Division to declare the entire forests of the Division, excluding Athirappilly Range, as a Sanctuary so that the whole area becomes a conservation unit. Out of the total Divisional forest area of 413.94 sq km, 318.84 sq km was proposed to be declared as Sanctuary. Though an extent of 215.75 sq km<sup>16</sup> of this was added to Parambikulam Tiger Reserve, the Department did not take action to declare the remaining area of 103.09 sq km as Sanctuary. This weakened enforcement of penal provisions against violation of prohibited/restricted activities like restricting entry to the sanctuary, prohibition of entry with weapon, etc.

The Government replied (March 2018) that the process of issuing final notification of the area handed over to the PA network was in progress.

#### **2.6.1.7 Deficiencies in planning**

In forest areas, other than the PAs and Tiger Reserves, management of wildlife and animal habitats are included in the Working Plan of the respective Forest Division. In respect of PAs and Tiger Reserves separate plans are prepared by

---

<sup>14</sup>Nenmara Territorial Division 42.99 sq km, Chalakkudi Territorial Division 42.24 sq km and Vazhachal Territorial Division 60.53 sq km.

<sup>15</sup>Working plan is a written scheme of management aiming at continuity of policy controlling the systematic treatment of a forest prepared for each territorial division.

<sup>16</sup>60.53 sq km core and 155.22 sq km as buffer.

respective Divisions for management of wildlife and habitats and approved by PCCF&CWW<sup>17</sup>/National Tiger Conservation Authority (NTCA)<sup>18</sup>. As per the National Forest Policy, 1988, no forest should be permitted to be worked without an approved working plan by the competent authority and the National Working Plan Code, 2014 requires the working plans to be revised every 10 years.

The Divisional Forest Officers (DFOs)<sup>19</sup> as the Wildlife Wardens are responsible for the protection and conservation of wildlife and habitats in their respective jurisdictional area and are required to manage them through approved working plans of the Division.

Audit observed that in Vazhachal, Ranni, Malayattoor, Konni and Kothamangalam Divisions, there was no working plan during the period 2012-17, 2012-14, 2012-15, 2011-15 and 2011-16 respectively. In the absence of a 10 year working plan, these Divisions followed short term interim management plans.

Short term plans were prepared without detailed planning inputs, or any prescription for management of wildlife and habitats. Implementation of short term plans without inclusion of area specific measures for conservation and protection of wildlife negatively impacts scientific management of forest.

The Government accepted (March 2018) the audit observation and stated that the lack of continuous approved working plan was due to the long process to be followed in the preparation and approval of the working plans. But currently all divisions except Vazhachal had got approved working plans prepared as per the new working plan code, which included adequate management measures for protection and conservation for wildlife.

#### **2.6.1.8 Shrinkage of elephant habitat in Munnar Division and its impact**

Catchment area of Anayirangal Reservoir<sup>20</sup> in Munnar Division was a hub of wild animals especially elephants due to the availability of water and fodder. During the year 2002, the State Government rehabilitated landless tribes in Pandhadikkalam, 301 Colony<sup>21</sup> and 80 Acre area adjacent to Anayirangal. There were 15 settlements surrounding the reservoir, of which five were new tribal settlements, which came up after land assignment in 2002. With the establishment of new settlements, the available habitat of elephants in this area shrank, which resulted in intense human-elephant conflicts in this area. To counter animal attacks, damage of crops, etc. solar fences were built along the private land boundaries blocking the natural path of elephants, which made them more aggressive.

Many incidents of death, damage to crops/building, injuries etc. due to animal attacks, disturbances to wildlife due to tourism activities were reported in

<sup>17</sup>PCCF&CWW approves the management plan of PAs.

<sup>18</sup>NTCA approves the Tiger Conservation Plan.

<sup>19</sup>The DFOs are responsible for management of their respective territorial divisions, whereas wildlife wardens are responsible for management of wildlife divisions which comprise PAs.

<sup>20</sup>Reservoir area of Anayirangal Dam is controlled by Kerala State Electricity Board Ltd.

<sup>21</sup>Around 301 families settled down at Anayirangal area between 2001 and 2005, hence the name 301 Colony.

Chinnakanal and Anayirangal area of Devikulam Range. Many of the inhabitants rehabilitated abandoned the area due to frequent elephant attacks.

The situation was further aggravated by the use of boats by Kerala State Electricity Board Limited for tourism activities in the reservoir. The elephants, which get disturbed by the boating activity do not have an escape route as all other sides are surrounded by private properties secured by fences. Thus, due to the actions of the Government neither the purpose of tribal welfare nor wildlife conservation is served.

The approved Working Plan of the Division (period 2010-20) emphasised keeping the corridors to Mathikettan side and Kannan Devan Hill side, free from activities impeding elephant movements. The Working Plan recommended protecting the entire valley by declaring it as an Ecologically Sensitive and Protected Area and to confine the human settlements by re-locating them to areas less frequented by elephants.

The Act empowers the State Government to declare an area as PA if it considers that such area is of adequate ecological, faunal, floral, geomorphological, natural or zoological significance, for the purpose of protecting, propagating or developing wildlife or its environment. The area was frequented by elephants and the Department objected to the rehabilitation, but the Government ignored this and rehabilitated landless tribals in this area.

Audit observed that the Department did not submit any proposal to the Board for declaring the area as PA. The Division requested the District Collector, Idukki only in May 2017 to submit a proposal to the Government for relocating the remaining people of the 301 Colony elsewhere.

Non-declaration of the area as PA is causing continued human-wild animal conflicts.

The Government stated (March 2018) that the area as pointed out fell under Anamudi Elephant Reserve managed as per the prescriptions in the approved Elephant Reserve Management Plan. So it may not be required to declare the said area as a PA as mentioned in the audit observation.

The reply is not acceptable as in the working plans proposed by the Department and approved by MoEF & CC, the area should have been declared as PA for elephant corridor and the tribals should not have been rehabilitated in this area.

**Recommendation No.1: The Government may initiate steps to expedite final notification for declaration of the Sanctuaries/National Parks.**

**Recommendation No.2: The Government may take measures to ensure continuity of working plans.**



## 2.6.2 Implementation of conservation, protection and enforcement measures

### 2.6.2.1 Population of umbrella species

Tigers and elephants serve as umbrella species<sup>22</sup> for the conservation of all biota represented by the ecosystems. The status of their population indicates the well-being of the ecosystem.

According to the censuses and as reported by the Wildlife Institute of India, Dehradun the population of tigers in Kerala increased from 46 in 2006 to 136 in 2014. Similarly, as per the report of elephant population census August 2017, estimated elephant population in Kerala increased from 2,735 in 2012 to 3,054. This indicates that the protection and conservation measures implemented by the Department is yielding results.

### 2.6.2.2 Ineffective surveillance

- The Act prohibits hunting of wild animals. The Plans of the Divisions prescribe construction of camp sheds at vulnerable and strategic locations with constant presence of forest officials/protection watchers to strengthen anti-poaching initiatives.

Audit observed that out of 60 anti-poaching camps prescribed for construction in eight<sup>23</sup> Divisions test checked, only eleven were constructed.

- In terms of the Forest Code, Beat Forest Officer (BFO)<sup>24</sup> is to perambulate the area under his beat in such a way that the entire beat area is covered in every seven days. It is the duty of the BFO to prevent forest offences and to collect and communicate to senior officers all information regarding the forest offences committed or attempted, to make private enquiries on suspicious characters frequenting the forest and find them, etc.

Audit observed that 12 offences of elephant killings in Malayattoor Division committed between June 2014 and January 2015 and four elephant killings in Vazhachal Division in June 2015 were detected by the Divisions only after several months of the incidents, that too on the offender confessing to the crime.

This was indicative of inadequate surveillance by the Divisions.

The Government replied (March 2018) that a detailed protection plan was prepared for each division identifying the vulnerable areas and that interior camping and perambulation routes were identified in the plan. The protection was

<sup>22</sup>Umbrella species are those species selected for making conservation related decisions as protecting those species indirectly protects many other species that make up the ecological community of its habitat.

<sup>23</sup>Konni, Periyar West, Ranni, Malayattoor, Munnar, Vazhachal, Silent Valley and Idukki Divisions.

<sup>24</sup>Earlier termed as Forest Guard.

strengthened through revamping the wireless network, GPS tracking, Personal Digital Assistant devices, installing camera traps, etc.

### **2.6.2.3 Issues relating to wildlife offences**

#### ➤ **Ineffective handling of wildlife offences**

Hunting (poaching) of wild animals, trespassing into the WLS, NP, Reserve Forest, etc. are offences punishable under the Act. According to the Forest Code, when a forest officer below the rank of Range Officer (RO) detects commission of a forest offence, he shall submit to the RO within 24 hours, an occurrence report of the case in the form of Mahassar setting forth all the details of the offence committed. On receipt of the report, RO after proper enquiry should submit a report in Form B<sup>25</sup> to the DFO.

Audit observed that in the 10 Divisions test checked, 630 wildlife offences were registered since 2000, of which, 165 offences were booked by RO but not charged in court for want of submission of Form B report as shown in **Appendix 2.3**.

The average rate of conviction in the wildlife offences disposed of by the Courts in respect of the test checked Divisions was 22 *per cent*. Some of the reasons for low rate of convictions in the Court were due to the inability of the investigating officers to gather and produce proper and sufficient evidences to establish the crime, failure in producing the articles seized at the crime spot, and procedural lapses.

Offences committed in the Sanctuary are to be charged under the provisions of the Act; instead, it was observed that some cases<sup>26</sup> were booked by the Wayanad Wildlife Division under the Kerala Forest Act, 1961, reducing the gravity of such offences.

The Government replied (March 2018) that regular refresher courses were being conducted by the State Forest Institutes regarding wildlife crime investigation and the trend was changing and many of the wildlife offenders were convicted.

#### ➤ **Permitting declaration of animal articles without issue of notification**

According to Section 40 (1) of the Act, every person having captive wild animals, specified animal articles, etc. is liable to declare particulars of such captive wild animals or specified animal articles to the Chief Wildlife Warden (CWW) or the authorised officer within thirty days from commencement of the Act. The CWW on receipt of the declaration would issue a certificate of ownership, under Section 42 of the Act. As per Section 40(2B), every person inheriting any captive animal, animal article, trophy or uncured trophy was required to make a declaration to the CWW or the authorised officer within ninety days of such inheritance.

Under Section 40(4) of the Act, the State Government may, through a notification published in the official gazette, require any person to declare to the CWW or the

---

<sup>25</sup>The report furnished by a Range Forest Officer to the Divisional Forest Officer after investigating a forest offence.

<sup>26</sup>Out of 180 cases, six cases of illegal constructions, one case of illicit felling of sandal woods, two cases of setting forest fire and one case of destruction of *junda* (cairn).

authorised officer any animal article or trophy (other than musk of a musk deer or horn of a rhinoceros) or salted or dried skins derived from an animal specified in Schedule I or Part II of Schedule II in his control, custody or possession in such form, in such manner, and within such time, as may be prescribed. Three opportunities were given to the public, first in 1972, then from 1978 to 1991 and finally in 2003 to declare possession of animals and animal articles. During the period 2012-17, there were two declarations of possession of animal articles under section 40(4) of the Act by a prominent film actor, consequent to detection (21 December 2011) of four elephant tusks by forest authorities at his house. The Department registered (2012) an offence<sup>27</sup> against the actor. The Government granted (16 December 2015) him permission under Section 40(4) of the Act to declare possession of the four articles by issuing an order specifically for the actor. Thereupon, he requested (03 February 2016) for permission to further declare 13 artefacts made of ivory, stated to be family heirlooms. The Government granted (17 February 2016) permission for this also and he declared (24 February 2016) possession of the artefacts to the CWW.

Audit observed that issue of a specific order to benefit an individual, instead of issuing a notification published in the official gazette was a violation of Section 40(4) of the Act.

The Government replied (March 2018) that on 15 December 2015, the CWW submitted to the Government a draft notification for providing one time opportunity to individuals for declaration of elephant tusks and ivory artefacts.

However, in the same reply, Audit observed that, the Government instead of providing opportunity to individuals, issued an order permitting only the actor to declare animal articles in his possession. Further, Audit observed that the order was not as per the provisions of the Act, which required the Government to issue a notification published in the official gazette and that similar offences<sup>28</sup> booked by the Divisions did not receive such favourable treatment but were either under investigation or under trial in Courts.

#### **2.6.2.4 Degradation of forest ecology due to encroachments**

The Act envisages ecological and environmental security of the country through protection of wild animals, birds and plants. Any encroachment of forest land (wildlife habitat) and destruction of plants by humans for cultivation of crops is a serious threat to the ‘natural home of wild animals’.

The Act does not contain provision to book the encroachments in areas other than PAs as an offence. Hence, the encroachments are to be evicted using powers contained in Section 66 of the Kerala Forest Act, 1961 or provisions of other applicable statute. The Government notified the Kerala Land Assignment (Regularisation of Occupations of Forest Lands Prior to 01 January 1977) Special

---

<sup>27</sup>OR No.14.2012 of Mekkappala Forest Station of Malayattoor Division.

<sup>28</sup>For instance OR No.24.2008 (illicit storage of wildlife trophy), OR No. 18.2009 (illicit custody of stuffed head of tiger and leopard),OR No.10.2015 (illicit possession of elephant tusk and teeth), etc registered in Devikulam Range.

Rules, 1993 through which an extent of 28,588 hectares (ha) of forest land admittedly encroached in the State prior to 01 January 1977 were regularised. Thereafter, no fresh encroachment was to be allowed and any attempt at encroachment from any quarter was to be dealt with firmly and new encroachments after 01 January 1977 were to be evicted.

Audit observed that 11,917.8952 ha of forest land was encroached<sup>29</sup> in the State after 01 January 1977, of which, only 4,628.5555 ha was evicted. The balance 7,289.3397 ha included areas coming under Territorial Divisions Munnar, Kothamangalam and Konni<sup>30</sup> test checked in audit. An extent of 310.632 ha which was not a part of the 7,289.3397 ha was also encroached in the Kaliyar Range of Kothamangalam Division.

The Department failed to prevent encroachments made after the regularisation of occupation of forest land as on 01 January 1977 in spite of being empowered under Section 66 of the Forest Act, 1961.

According to Rule 26 of the Forest Settlement Rules, 1965 when a forest land is notified as reserve forest under Section 19 of the Forest Act, 1961, the Chief Conservator of Forest should immediately take necessary steps to demarcate the boundaries of the land by construction of permanent cairns. Non-demarcation of forest boundaries with cairns facilitated encroachments.

Even though 31 years elapsed since the last reserve forest was notified, Audit observed that as of March 2017, construction of a total of 41,880 Cairns were pending.

The Government replied (March 2018) that following High Court orders, the Department handed over a list of encroachers to the concerned District Collectors for eviction, and an extent of 866.8997 ha was cleared of encroachment so far. Further, against the construction of 41,880 cairns pending as of March 2017, 12,258 were constructed upto February 2018.

#### **2.6.2.5 Constructions in Wayanad Wildlife Sanctuary in violation of the provisions of the Act**

During the period prior to 1950, cultivable lands within the Reserve Forest of Wayanad Plateau were leased out on an annual basis under Section 21 of the Madras Forest Act, 1882, for cultivation of annual crops. In 1973, an extent of 344.40 sq km of the reserve forest including leased out lands was notified as Wayanad Wildlife Sanctuary (WWS) under the Wayanad Wildlife Sanctuary Rules, 1973. Section 33 of the Wildlife (Protection) Act, 1972 does not permit construction of permanent buildings within the sanctuary area other than for sanctuary purpose.

Audit observed that though the lease agreements were not renewed since 2004, the possession of the leased-out land was not taken by the Department. The present occupiers of the erstwhile leased out land were not the original lessees.

---

<sup>29</sup>As per a counter affidavit filed by the State before the High Court in September 2015.

<sup>30</sup>Measuring 1,099.6528 Ha, 147.5961 ha and 11.41 ha respectively.

The Assistant Wildlife Warden in his field inspection report (December 2012) stated that 13 residential buildings and 19 commercial buildings, three to forty years old were illegally built on the land included in lease nos. 3 and 4 near Muthanga check post. No action was taken by the Department to remove these unauthorised structures despite being empowered to do so under Section 34A of the Act.



**Pic 1&2 – Buildings illegally constructed in the erstwhile leased land near Muthanga checkpost in the Wayanad Wildlife Sanctuary. (Both pictures taken on 09 March 2018)**

The Government replied (March 2018) that eviction process was difficult, and it would create law and order issues. Further, most of the people living in the leased-out land were landless farmers and were forest dependent and that they could not be treated as illegal encroachers and summarily dealt with.

#### **2.6.2.6 Un-regulated tourism activities in Periyar Tiger Reserve**

The Department leased out 946.91 ha<sup>31</sup> of forest land in Goodrical Range of Ranni Division for cardamom plantation to Kerala Forest Development Corporation Limited (KFDC), which handed over (1979) 34 ha of it to the Kerala State Electricity Board Limited (KSEB) to construct a dam at Gavi. During 1998, the KFDC started eco-tourism activity near the Gavi Dam and used the surrounding lease area for eco-tourism. During the year 2007, Government added an extent of 148 sq km (14800 ha) of reserve forest of Goodrical Range encompassing the Gavi eco-tourism area to the core area of PTR.

Tourist vehicles entering the core area unaccompanied by forest staff/authorised guides often went close to wild animals leading to confrontation. The tourists were also involved in unauthorised trekking, setting of fire and littering. Hence traffic through the core area of PTR was considered in the TCP as a prioritised threat to the Tiger Reserve.

NTCA brought out (October 2012) Normative Standards for regulating tourism activities and Project Tiger under Section 38-O(1)(c) of the Act. The Standards stipulate that the CWW should ensure preparation of a tourism plan by each tiger reserve as part of the Tiger Conservation to include identification of corridor

<sup>31</sup>146 ha in 1977 and 800.91 ha in 1981.

connectivity and important wildlife habitats and mechanisms to secure them along with fixing of a ceiling on the number of visitors. This was not complied with. Other stipulations such as constitution of a Local Advisory Committee (LAC), establishment of an advance booking system to control tourists and number of vehicles, etc. were also not complied with. Though tourism activities in Tiger Reserves are to be under the overall guidance of the respective Tiger Conservation Foundations and the LACs, Gavi tourism area was managed by KFDC alone. These non-compliances were also against the direction (16 October 2012) of the Honourable Supreme Court to follow the guidelines issued by NTCA in respect of tourism activities in and around Tiger Reserves.

The Government replied (March 2018) that the tourism activities were regulated inside the Park as per the instructions and guidelines issued by NTCA in this regard. The tourism management in PTR was carried out as per the prescriptions approved in the TCP and that restrictions were placed on the number of vehicles permitted to enter the PTR.

However, it is observed that the regulations imposed are not as per the normative standards for tourism activities inside tiger reserves issued (October 2012) by NTCA.

#### **2.6.2.7 Non-clearance of undergrowth below power lines**

Four high tension power (HT) lines<sup>32</sup> passes through the core of PTR. Maintenance of the HT lines and timely clearance of the undergrowth beneath them is the duty of KSEB. The TCP requires the Division to conduct periodical joint inspection of power lines with KSEB during the period April to September every year, which was not complied with. The Department did not take any follow up action with KSEB on this matter. Five out of the 15 fire incidents reported since January 2013 to June 2017 in the Periyar East Division were due to sparks from the HT lines. Audit further observed that, in November 2016 one leopard and a *Nilgiri Langur* were electrocuted from an 11 KV line.

Though the risk of fire from HT lines were identified in the Plan, the Department failed to follow up the matter with KSEB, which led to repeated fire incidents damaging the forest ecology.

The Government in its reply (March 2018) accepted the audit findings and stated that steps would be taken in future to enforce KSEB officials to take necessary preventive measures.

#### **2.6.2.8 Human habitation inside Wayanad Wildlife Sanctuary**

The Act as well as the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, require that forest rights of the forest dwelling Scheduled Tribes and other traditional forest dwellers recognised in forest areas within the core and critical wildlife habitats of PAs may be modified and resettled for providing inviolate areas for wildlife conservation. The people were to be relocated paying compensation in accordance with National

---

<sup>32</sup>Lower Camp-Sabarigiri, Sabarigiri-Nattakom and Moozhiyar-Sabarigiri (2 parallel lines).

Rehabilitation and Resettlement Policy, 2007. The total cost projected for the relocation was ₹80 crore in 2009.

The WWS covers an area of 344.40 sq km. According to a report prepared (December 2009) by Kerala Forest Research Institute, Peechi (KFRI) there were 110 settlements in WWS area, consisting of 2,613 families. Out of this, 2,485 eligible families<sup>33</sup> were willing to relocate from the sanctuary.

Audit observed that of the 2,485 eligible families who opted for relocation, the Department was able to relocate only 192 eligible families from seven settlements so far. The delay in relocation would lead to increase in the number of eligible families over a period of time, which in turn would lead to cost overrun requiring additional funds and further delay in relocation.

Further, human habitation inside the sanctuary could lead to frequent human-wild animal conflicts resulting in loss/injury to humans as well as wild animals.

The Government replied (March 2018) that the Department was pursuing the initiatives to complete the relocation package in a time bound manner.

#### **2.6.2.9 Violation of conditions of Master Plan for Sabarimala affecting the ecology of the Periyar Tiger Reserve**

The Sabarimala Ayyappa Temple is located within the PTR area as an enclave attracting millions of devotees every year. The increasing number of pilgrims and growing demand of Travancore Devaswom Board (TDB) for additional land for infrastructure development at Sabarimala led to habitat degradation. Out of 18 major threats identified by the PTR in Tiger Conservation Plan (TCP), Sabarimala Pilgrimage ranked the first.

The Government brought out (May 2007) a Master Plan for Sabarimala (MPS), which was to be implemented by the TDB. The TCP of the PTR, stipulated that all developments and management at Sabarimala should be in tune with the MPS and implementation of the Master Plan was to be monitored by the Deputy Director (Periyar West). The TCP emphasised solid waste management and sanitation interventions in the MPS as these were closely linked with the health of the wildlife habitat of the surrounding forests. As per Para 2.1.1 of the Infrastructure Module - solid waste management, water supply and sanitation of the MPS, the collection, transportation and disposal of waste at Pampa and Sannidhanam was the responsibility of the TDB.

A scrutiny of the relevant records revealed the following deviations/violation of the MPS.

- The TDB failed to set up composting facility at Pampa in line with the Solid Waste Management Guidelines of MPS. But the Department did not take any action against the non-compliance by TDB.

<sup>33</sup>Major son/unmarried daughter/sister, widow, woman divorcee, mentally and physically challenged persons and minor orphan counted as separate families.

- There are two Sewage Treatment Plants (STP) at Sabarimala, one at Pampa and the other at Sannidhanam. No drainage facility to convey waste water of the hotels to the Pampa STP was provided. Similarly, the sewage pipes from the buildings near Kumbalamthodu (stream) to the STP at Sannidhanam were left unconnected. Resultantly, the overflowing waste water got mixed up with the Kumbalamthodu, which in turn reached and polluted river Pampa frequented by wild animals.
- In place of underground electrical supply lines envisaged in the MPS, overhead cables without insulation were drawn.



**Pic.3: Waste water overflowing Kumbalamthodu**



**Pic.4: Overhead lines in trek path to Sannidhanam at Sabarimala**

**(Both pictures taken on 27 July 2017)**

The Government in its reply (March 2018) accepted the audit observations and stated that utmost importance of establishing composting facility at Pampa would be brought to the attention of the high power committee and that the need for urgent measures for improvement of drainage system connected to STPs would be brought to the notice of the TDB officials at the earliest. It was also stated that matter regarding non-insulated overhead cables existing in traditional trek route was brought to the notice of KSEB.

#### **2.6.2.10 Inordinate delay in restoration of elephant corridors**

Fragmentation of wildlife habitats is a major threat to long-term conservation of species. Large animals like elephants require extensive area for survival and are more affected by loss of habitat contiguity. Construction of roads/buildings, settlements, cultivation, etc. obstruct the natural corridors causing some of them to disappear. Establishing biological corridors is one of the measures to ensure genetic exchanges within and between populations.

Elephant habitats at a minimum should be of several hundred sq km to ensure short term and several thousand sq km to ensure long-term viability. Protection and strengthening of existing corridors can be a solution to human-wild animal conflicts.



Referring to the four elephant corridors<sup>34</sup> mentioned in the Book ‘Right of Passage – Elephant Corridors of India’ (2004) the MoEF & CC requested (August 2006) the Government to take action to notify and protect the identified elephant corridors in the State. The Department submitted a proposal for restoration of four corridors,<sup>35</sup> which included three corridors mentioned in the above book.

Of these, restoration of one corridor *viz.*, Tirunelli – Kudrakote was achieved by two NGOs namely, Wildlife Trust of India and Asian Nature Conservation Foundation by purchase of private land in the corridor area and handing it over to the Government for conservation. Action taken by the Department to restore/establish the other three corridors is discussed below.

In respect of Periya-Kottiyoor corridor, the GoI accorded (November 2008) administrative approval for acquisition of 131.50 ha<sup>36</sup> of private land in Kottiyoor and Periya for restoration of traditional elephant corridors at a total cost of ₹7.89 crore and released ₹4.50 crore<sup>37</sup> in three instalments. The area was to be acquired by negotiated purchase through the Revenue Department within two years.

Nine years have since elapsed and it was observed that against 95 ha of land to be acquired in Wayanad, acquisition of 8.5676 ha at CRP Kunnu in Periya Village only was initiated. CRP Kunnu area was given priority since it was more vulnerable to animal attacks. A field visit to CRP Kunnu revealed construction of new residential buildings in the proposed corridor area.



**Pic.5&6: New buildings constructed in the area proposed for restoration of Elephant Corridor at CRP Kunnu & Chapparam (Both pictures taken on 13 September 2017)**

Regarding restoration of the other two corridors, *viz.* Periya-Pakranthalam and Nilambur Kovilakam-New Amarambalam, Audit observed that the Department did not take any action. The delay in restoration of those corridors can obstruct the free movement of elephants leading to increased human-wild animal conflicts in the area.

<sup>34</sup> (1) Periya-Kottiyoor (2) Tirunelli-Kudrakote (3) Periya-Pakranthalam and (4) Nilambur Kovilakam-New Amarambalam.

<sup>35</sup> (1) Periya-Kottiyoor (2) Tirunelli-Kudrakote (3) Periya-Pakranthalam and (4) Pallivayal-Tattur.

<sup>36</sup> 95 ha (later revised to 60.4468 ha) in Revenue District Wayanad and 36.50 ha in Revenue District, Kannur.

<sup>37</sup> First, second and third instalments of ₹1.50 crore each were released in the year 2008-09, 2009-10 and 2010-11 respectively. Of this, ₹2.50 crore and ₹2 crore respectively were allocated to Kannur and Wayanad Districts.

The Department conceded that establishing of wildlife corridors were delayed and stated (February 2018) that acquisition of land was an issue as multiple agencies were involved and some of the landowners were not willing to vacate the land.

The Government replied (March 2018) that the reason for delay in starting restoration of the two corridors was because the priority was for those corridors where the elephants frequented.

The reply is not acceptable as even for the prioritised corridor (Periya-Kottiyoor), Government failed to establish inter-departmental liaisoning due to which land acquisition issues cropped up and remained unsettled even after nine years from the sanction of the project.

#### **2.6.2.11 Non-compliance to working/management plan prescriptions**

##### **➤ Deficiencies in implementation of fire management plans**

Fire lines are areas, which are cleared of vegetation in the hope of stopping or at least slowing a fire which may devastate large areas with grave ecological repercussions.

The Divisions make Fire Management Plans (FMP) in accordance with their requirements to check and mitigate the possibilities of forest fire. Audit observed that the fire protection measures in the following Divisions were not in accordance with a FMP, with shortfall in the creation of fire lines as given in **Table 2.2**.

**Table 2.2 – Shortfall in creation of fire lines**

Sl. No.	Division	Fire lines proposed in the FMP from 2012-13 to 2016-17 (in km)	Fire lines created from 2012-13 to 2016-17 (in km)	Shortfall in creation of fire lines (in km)
1	Silent Valley	1,120.00	876.730	243.270
2	Wayanad	2,234.00	1,214.000	1,020.000
3	Vazhachal <sup>38</sup>	1,292.22	839.685	452.535

Source : Data furnished by divisions

No fire lines were created in the area newly added (2007) to the PTR East Division from nearby Goodrical Range. The Warden, Wayanad Division stated (October 2017) that funds were not sufficient to create and maintain fire lines.

The Government replied (March 2018) that the fire lines are taken based on the fund availability and subject to the priority based on fire vulnerability.

The reply is not acceptable as FMP had made the provisions prioritising the fire vulnerability in forest areas and hence, adequate funds needed to be provided in accordance with FMP.

---

<sup>38</sup>FMPs for the years 2014-15 & 2015-16 were not made available to Audit.

➤ **Non-eradication of invasive weeds**

*Senna*, *Lantana*, *Eupatorium*, *Mikania*, *Parthenium*, etc. are the common types of invasive alien<sup>39</sup> plants identified in the State and some of these species became invasive, out-competing and preventing growth of the native species. They also increase the chances of forest fire. The Working Plans/Management Plans/Conservation Plans provide prescriptions for eradication of invasive weeds. Audit observed that, the eradication works as prescribed in the Plans were not carried out by some Divisions as shown in **Appendix 2.4**.

Audit also observed that WWD failed to take adequate management measures to eradicate *Senna Spectabilis* (*Senna*), planted in Wayanad district long ago under the social forestry programme of the Department and which is now spread extensively over the Sanctuary area. It has become a threat to wildlife and indigenous plants owing to its quick growth and has lowered the quality of ecosystem and reduced the food of herbivores. The Division stated that no effective method existed to eradicate the exotic weeds fully and that KFRI was directed to experiment with new methods to eradicate *Senna*.

The Department failed to recognise the seriousness of the issue and take measures to contain the invasion in time. Further, neither was the affected area surveyed nor did the problem find a mention in the management plan of the wildlife sanctuary till 2014.

The Government replied (March 2018) that special funds were allotted for controlling the exotic weeds in WWS.

The Government initiative is, however, inadequate in addressing the issue as spread of the weed is not restricted to WWS alone.

➤ **Watershed Management**

Watershed is an area bound peripherally by water, parting and draining ultimately to a particular watercourse or body of water. Protection and conservation of watershed is necessary to minimise soil erosion, floods, silting etc. and to ensure availability of water for wildlife in natural streams, waterholes and check dams. The plans prescribed construction of small check dams across streams, at sites frequented by wild animals to secure water throughout the year.

Audit scrutiny of the watershed management activities carried out by various Divisions revealed deficiencies in the execution of plans as shown in **Appendix 2.5**.

- A joint physical verification (August 2017) of three check dams along with the Range Officer in the Neriya Mangalam Range (Munnar Division) revealed that the water carrying capacity of two check dams at Anachanda and Eanthanampara were severely reduced by accumulation of silt.

---

<sup>39</sup>International Union for Conservation of Nature and Natural Resources (IUCN) defines alien invasive species as alien species which become established in natural or semi-natural ecosystems or habitat, an agent of change, and threatens native biological diversity.

Acute scarcity of water could lead to migration of animals to other areas, which may result in crop raids, damage to human life, etc.

The Government replied (March 2018) that construction of check dams, de-silting the ponds and check dams, maintenance of check dams, gully plugging are carried out as soil and moisture conservation techniques.

The reply does not address to the audit observations adequately.

#### **2.6.2.12 Non-compliance with the requirements of Kerala Captive Elephant (Management and Maintenance) Rules, 2012**

##### **➤ Non-providing of stables for elephants**

There are 599 captive elephants in the State. The Government, in exercise of powers under Section 64(2) of the Act, notified<sup>40</sup> the Kerala Captive Elephants (Management and Maintenance) Rules, 2012 to address the problem of ill-treatment of captive elephants and to ensure their proper upkeep and management. Rule 3 provided for proper housing of the elephants.

Site visit to the elephant camp (Aanakkotta) of Guruvayoor Devaswom revealed the following:

- The 'Aanakkotta', having 51 captive elephants had only 15 stables, each capable of accommodating one elephant. It was observed that the balance 36 elephants were kept in the open yard. Though the Additional Chief Secretary (Forests & Wildlife) directed (21 July 2016) the Guruvayoor Devaswom to construct shelters for all elephants within a month, only 10 sheds were constructed even after a year.

Thus, the directives under Rule 3 regarding proper housing of the captive elephants are not adhered to by the Guruvayoor Devaswom.

The Government replied (March 2018) that frequent inspections were being carried out to ensure compliance of the Kerala Captive Elephants (Management and Maintenance) Rules, 2012.

#### **2.6.2.13 Deficiencies in conservation of captive animals in Zoo**

The GoI framed Recognition of Zoo Rules, 2009 under section 63(1) of the Act according to which every zoo should endeavour to establish and sustain population of physically, genetically and behaviourally healthy animals for furthering the cause of wildlife conservation and communicating credible conservation message to the visitors through display of healthy animals in naturalistic settings.

- There are two medium, one small and two mini zoos in Kerala. As per Para 3 of Schedule to Rule 10 of the Recognition of Zoo Rules, 2009, every zoo is to prepare a master plan and get it approved by the Central Zoo Authority (CZA). According to the information furnished by the

---

<sup>40</sup>Superseding the Kerala Captive Elephants (Management and Maintenance) Rules, 2003.

CWW, only the two<sup>41</sup> medium zoos prepared master plans for development and planning.

- A visit to the State Museum and Zoo at Thrissur (a medium zoo) by Audit revealed that the CZA renewed (April 2017) recognition of the zoo upto January 2018 subject to compliance of 27 conditions some of which were to be complied with immediately while others were to be met within a period of six months. The CZA also requested (April 2017) the PCCF & CWW to implement the conditions. It was seen that against the 27 conditions stipulated by the CZA, 11 conditions (**Appendix 2.6**) were not complied with/implemented in the Zoo (October 2017).



**Pic.7: Temporary measure to cover damaged enclosure (Picture taken on 28 September 2017)**



**Pic.8: Snake stuck in rusted wire mesh (Picture shared by the Curator, Thrissur Zoo on 28 September 2017)**

Similar lapses/deficiencies pointed out by the CZA while granting recognition in earlier years also were ignored. Many enclosures of animals were in dilapidated condition for want of periodical maintenance work.

Non-compliance with the directions prescribed by the CZA and inadequate maintenance of cages/enclosures negates the very purpose of having captive wild animals.

The Government replied (March 2018) that the audit findings were taken note of for future compliance.

**Recommendation No.3: The Department may take necessary steps for establishing sufficient anti-poaching camps, ensuring effective perambulation etc.**

**Recommendation No.4: The Department may evolve an effective mechanism to deal with the backlog in investigation of wildlife offences and in improving the conviction rate.**

<sup>41</sup>State Museum and Zoo, Thrissur and Zoological Garden, Thiruvananthapuram.

**Recommendation No.5: The Department should evolve an action plan for eviction of all encroachments by invoking the legal powers available.**

**Recommendation No.6: The Government may ensure compliance with the Normative Standards for tourism activities in Tiger Reserves issued by NTCA.**

**Recommendation No.7: The Department may take measures to expedite the relocation of settlements inside the sanctuary.**

**Recommendation No.8: The Department, by proper monitoring and coordination with the TDB may ensure that the infrastructure development activities carried out in the land transferred to the TDB do not lead to habitat/ecology degradation.**

**Recommendation No.9: The Department may accelerate its efforts towards restoring elephant corridors.**

## **2.7 Conclusion**

- Advice of the State Board for Wildlife to declare the core and buffer areas added to Periyar, Parambikkulam Tiger Reserves and Silent Valley National Park as wildlife sanctuaries was not implemented. Even after eight to fourteen years of initial notification, the legal process to notify the four Wildlife Sanctuaries and three National Parks was not completed.
- There was absence of planning in respect of new core areas added to Tiger Reserves and lack of continuity of working plans and measures for conservation of wildlife and its habitat in territorial divisions.
- Unregulated tourism activities in a Tiger Reserve adversely affected the conservation of wildlife and habitat.
- Against the four identified elephant corridors in the State, the Department is yet to restore/legalise three corridors.
- The surveillance measures in the Divisions were poor. Inadequate handling of wildlife offences resulted in low rate of conviction and large number of cases pending investigation.