

Ministry of Environment & Forests  
Government of India



**Report of the Working Group on Wildlife  
Ecotourism and Animal Welfare**

for the  
**12th Five Year Plan  
2012-2017**

submitted to  
**Planning Commission  
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सत्यमेव जयते



जहाँ है हरियाली ।  
वहाँ है खुशहाली ॥



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## **ANNEXURES**

**Report of the Resource Group on Wildlife Management for the 12<sup>th</sup> Five Year Plan**

**Report of the Resource Group on Ecotourism and Livelihoods for the 12<sup>th</sup> Five Year Plan**

**Report of the Resource Group of Animal Welfare for the 12<sup>th</sup> Five Year Plan**

## **Executive Summary**

### **1.0 Background:**

India is uniquely blessed with wildlife diversity. One of eighteen mega diverse countries, it is home to 7.6% of all mammalian, 12.6% of all avian, 6.2% of all reptilian, 4.4% of all amphibian, 11.7% of all fish, and 6.0% of all flowering plant species. This diversity becomes even more remarkable given that **our country, with only 2.4 per cent of the total land area of the world, contributes 8 per cent to the known global biological diversity, while also being the second largest populous nation in the world, with over 1.2 billion people.**

#### **Management of this biodiversity is a unique responsibility and challenge.**

It is this unique diversity that the people of India hold in great esteem, are very proud of and have strong cultural and social bonds with. This deep rooted historical and cultural association with wildlife is central to India and its people. With the burgeoning human population and its multifarious requirements the pressure on the wilderness areas and the wildlife found therein has multiplied manifold leading to immense pressure on the natural resources of the nation to the extent that their conservation has become a very challenging task. If suitable strong and persuasive efforts are not made immediately the consequences may be negative and irreparable. The task of acting as spokespersons for this unique natural and biological wealth of the nation was assigned to the Working Group on Wildlife, Ecotourism and Livelihoods and Animal Welfare.

### **2. Organization of the Working Group:**

**2.1** To facilitate preparation of the report based on extensive debate, sharing of concerns, views and information amongst different stakeholders and keeping in view present and emerging challenges in the assigned subjects, the main Working Group (WG) was organized into three Resource Groups covering broad themes of

- i) Wildlife Management – Resource Group-I
- ii) Ecotourism and Livelihoods – Resource Group-II
- iii) Animal Welfare – Resource Group-III

**2.2** Each Resource Group (RG) having well known, active and dedicated experts as members was facilitated in its working by a member designated as its coordinator. Each RG met a number of times alongside extensive exchange of information and views through e-mail. The coordinators of each RG discharged the onerous responsibility of giving shape and focus to the discussions and information exchanged amongst members and compiled the same into individual Resource Group Reports. The detailed reports of the three RGs are annexed to the integrated report of the main Working Group which is based on the salient features of each RG Report. Referring to the individual RG Report will help in comprehensive appreciation of the RG Theme.

### **3. Gap analysis:**

All three RG Reports are based on the evaluation and analysis of performance related to the allocated theme during the 11<sup>th</sup> Five Year Plan (FYP). For example, RG-I carried out a detailed SWOT Analysis of performance of Wildlife Sector till the 11<sup>th</sup> FYP. The performance analysis enabled each RG to comprehensively analyze the progress made during the 11<sup>th</sup> plan period and put forth practical recommendations for the sector during 12<sup>th</sup> Five Year Plan. The RGs have also factored in the newer challenges that have come up in recent times and have made proposals that will improve the performance of the sector.

Lack of awareness was identified by all the three RGs as a critical gap in the planning process of these respective subjects/themes. Awareness was recognized as a potent and effective tool to leverage and mobilize support of specific stakeholders and the public at large in conservation of wildlife resources and animal welfare. A distinct component of awareness generation is intended to be incorporated in the three sub-sectoral themes during the 12<sup>th</sup> Five Year Plan. This will not only generate awareness but may also be useful in mobilising resources both physical and financial for the sector.

### **4. Objective:**

The document has been prepared with the basic surmise that “Wildlife Management, Ecotourism and Animal Welfare are to be treated as a Priority Sector during the 12<sup>th</sup> Plan as the conservation of our natural wealth, biodiversity and ecology has tremendous economic consequences and its wellbeing is in the larger national interest as well as being in the interest of mankind.

## 5. Wildlife Management:

This theme occupies major part of the WG report, and truly so because of the all encompassing domain of this theme in the sector. The report lucidly brings out the challenges and opportunities in respect of wildlife management. Continued fragmentation of important wildlife habitats due to inadequately planned developmental imperatives leading to ever-intensifying human-wildlife conflict plagued by inadequate planning priority and investment have been prominently flagged in the report. The need for improving the working conditions of and facilities for the field staff has been identified as a major thrust area. The role of local communities in strengthening conservation has been strongly emphasized and several important activities have been identified to support this. Encouraging innovation and scientific tools, as also incorporating technological advances like GIS, remote sensing and e-monitoring for strengthening wildlife management is emphasized. The role of building up specialized institutions and agencies like the Wildlife Institute of India (WII) and the Wildlife Crime Control Bureau (WCCB) has been adequately explained. Focus on conservation and management of endangered species through a project-based approach has been suggested for important keystone species such as snow leopard, lion, bustards, vulture, dolphin and gharial. Inadequacy of wildlife veterinary care has also been dealt with. Project Tiger and Project Elephant occupy prominent place amongst prioritized species for conservation. Human resource development, modernization of the wildlife field force and international cooperation in wildlife conservation are also covered in the report. The need of enlarging the role of the CZA and WCCB has also been covered in the report.

**The sector urgently needs reforms and much higher quantum of support in order to effectively discharge its roles and responsibilities.**

Resources available for the sector today are barely sufficient to carry out the minimum needed to sustain its life nourishing functions, what to say of carrying out innovations or reaching out to a wider constituency.

The report strongly presents the case for identifying wildlife conservation as a "Priority Sector" under the 12<sup>th</sup> Plan.

## 6. Ecotourism and Livelihoods:

For the first time, this subject has been dealt with at length in a Five Year Plan. The potential of ecotourism in leveraging the cooperation and support of local communities in wildlife conservation as also to provide them livelihood opportunities is brought out in no uncertain terms. The report recognizes the underlying central concept of partnership of local communities in conservation and management of wildlife resources by

enhancing and improving the quality of their livelihoods, and thus by increasing their stake in well-being of wildlife. A new scheme to operationalise the emerging concept of ecotourism for livelihoods of local communities is being proposed in the 12<sup>th</sup> FYP.

**7. Animal Welfare:**

The continuous neglect of this subject due to lack of input of appropriate planning and matching resource has been identified in the report. The need for leveraging support from non-government sources like corporate sector, individual philanthropists and other interested entities has been flagged. Awareness is flagged as a missing link in this sector and therefore, has been given special attention. Humane approach to deal with human-dog and human-monkey conflicts plaguing cities and rural areas alike are dealt with extensively in the report along with the need for strengthening veterinary support and ambulance services. A structured scheme to channelize the support from non-conventional resources like corporate sector and individual philanthropists is proposed during the 12<sup>th</sup> FYP.

**8. Summary of Proposals:** An amount of ₹ 11,423.18 crores has been proposed for the sector during the 12<sup>th</sup> FYP. Breakup of the requirement for the three sub-sectors is presented separately.

### Summary of Proposed Outlay for 12<sup>th</sup> FYP:

No.	Scheme	Amount (₹ in crores)
<b>A</b>	<b>WILDLIFE MANAGEMENT</b>	
1.	<b>Integrated Development of Wildlife Habitats (IDWH):</b>	<b>3000.00</b>
	<b>(a) Management Planning and capacity building</b>	
	<b>(b) Anti-poaching &amp; infrastructure development</b>	
	<b>(c) Restoration of habitats</b>	
2.	<b>Strengthening of Wildlife Division</b>	23.85
	• WCCB	175.00
	• CZA	400.00
	• NZP	176.15
	<b>TOTAL for Strengthening of Wildlife Division</b>	<b>775.00</b>
3.	<b>WII</b>	<b>224.18</b>
4.	<b>Project Tiger</b>	<b>5889.00</b>
5.	<b>Project Elephant</b>	<b>600.00</b>
	<b>Total: For Wildlife Conservation</b>	<b>10488.18</b>
<b>B</b>	<b>ECOTOURISM FOR LIVELIHOODS</b>	<b>635.00</b>
<b>C</b>	<b>ANIMAL WELFARE</b>	<b>300.00</b>
	<b>GRAND TOTAL</b>	<b>11423.18</b>

**Report of the Working Group on Wildlife, Ecotourism and Animal Welfare  
for the 12<sup>th</sup> Five Year Plan 2012-2017**

**1 Introduction:**

**1.1** India is uniquely blessed with wildlife diversity. One of eighteen mega diverse countries, it is home to 7.6% of all mammalian, 12.6% of all avian, 6.2% of all reptilian, 4.4% of all amphibian, 11.7% of all fish, and 6.0% of all flowering plant species. This diversity becomes even more remarkable given that **our country, with only 2.4 per cent of the total land area of the world, contributes 8 per cent to the known global biological diversity, while also being the second largest populous nation in the world, with over 1.2 billion people.** It is this unique diversity that the people of India hold in great esteem, are very proud of and have strong cultural and social bonds with. This deep rooted historical and cultural association with wildlife is central to India and its people.

In modern times, burgeoning human population and the consequent exploitation of land and forest resources along with hunting and trapping for trade, food and sport has threatened the survival of many species - from charismatic and well known species to many other lesser known animals and plants whose status is harder to determine.

Post Independence, there has been a growing concern about the decline of wildlife populations and the necessity of conservation and preservation of India's wildlife. This led to the enactment of the Wild Life (Protection) Act (WLPA) in 1972.

By an amendment in 2003, the objective of the WLPA, reads as follows, "An act to provide for the protection of wild animals, birds, plants and for matters connected therewith or ancillary and incidental thereto with a view to ensuring the ecological and environmental security of the country."

Thus wildlife conservation is acknowledged as integral to ecological and environmental security of our country rather than being limited to conservation of certain species of plants, animals and birds or their habitats.

**1.2.** The establishment of Protected Areas has been the major effort to secure wild species and their habitats across the country. Protected

Areas include Sanctuaries and National Parks but following an amendment to the WLPA in 2006, the new categories of Conservation and Community Reserves are also included as PAs. In 1998, the country had 426 PAs including 54 National Parks and 372 Wildlife Sanctuaries extending over 3.34 % of the geographical area of the country. By 2009, this had grown to a network of 661 PAs comprising 100 National Parks, 514 Wildlife Sanctuaries, 43 Conservation Reserves and 4 Community Reserves in different bio-geographic zones, extending to about 4.9 % of the geographical area of the country.

While such establishment of the Protected Areas Network is considered a major step forward in the conservation of India's wildlife, it must be noted that PAs as they exist today, have some major limitations. Mostly, they are not drawn as per ecological boundaries and are often too small in size to adequately sustain rich genetic resources and ecological processes. As such, corridors have become vital to the well being of most of our PAs and the species that they harbour. Yet, there is little acknowledgement and policy and legal support for such corridors. Commercial interests and the imperatives of development continue to impact many of our PAs, leading to further habitat fragmentation and disjunction. The settlement of rights leading to final notification of many PA's has not been completed despite passage of several decades even with clear judicial directives from the Supreme Court.

Over and above, is the issue of providing effective support to such areas and dynamic leadership to lead from the front. The quantity of human resources available for PA management is often only a fraction of what is required or even sanctioned and their quality also leaves much room for improvement.

Wildlife conservation is not just about conservation or protection of a species but ***is also intricately linked to a certain quality of life and also livelihood opportunities for local communities*** who live in and around such areas. The benefits, both actual and potential that accrue to local communities need to be properly understood and efforts made to enhance such benefits. Similarly, negative impacts of wildlife on such communities also need to be addressed on a priority.

Ecotourism is seen as a very potent tool to take inclusive growth to the local communities in and around wildlife rich areas while also enhancing the biodiversity values of such areas.

### **1.3 Performance of the Wildlife Conservation Sector till the 11<sup>th</sup> Five Year Plan**

#### **SWOT Analysis:**

The group has carried out a SWOT analysis of this sector as follows:

##### **Strengths:**

- Institutional framework of management going back to over a century.
- Established network of Protected Areas spread over about 4.9% of the geographical area of the country.
- A cadre of trained professionals at the senior and middle levels to deliver upon goals.
- Conservation of various species deeply embedded in our culture.

##### **Weaknesses:**

- Contribution of wildlife conservation to quality of life poorly understood and NOT acknowledged.
- Poor inter and intrasectoral linkages with other stakeholders.
- Poor infrastructure support for field level management.
- Poorly equipped and lowly motivated field cadre, with limited opportunities to improve knowledge and skills
- Management Focus limited to few charismatic species and PAs.
- Various ecosystem types not adequately represented in the PA network (e.g., marine, mountains, deserts etc.).
- Poor availability of research information on most species and ecosystems.
- Not enough incentives or acknowledgement and support for communities and people to value wildlife on their own.
- Lack of awareness, resulting in wildlife conservation to be generally seen by planners and policy makers as an "Impediment" to "growth" rather than an essential component of "sustainable growth".

**Opportunities:**

- Growing national and international concern on wildlife conservation issues.
- Support from higher judiciary on environmental issues per se as an element of "Right to life".
- Wider canvas and organisation of research including on social issues being made available for decision making.
- India's acknowledged leadership at various bilateral and multilateral forums such as CITES, CBD, SAWEN, SAARC, GTF, IWC etc.

**Threats:**

- Increasing loss and fragmentation of wildlife habitats and ever increasing biotic pressures.
- Growing Human-Wildlife Conflict.
- Inability of present accounting systems to adequately reflect contribution of wildlife conservation to national growth and quality of life.
- Growing transnational organised wildlife crime.
- Impacts of climate change and Invasive Alien Species.

**1.4 Resource Availability for the Sector:**

Presently, central assistance to the State/Union Territory Governments for protection and management of wildlife is provided under the following three **Centrally Sponsored Schemes (CSS)**:

- **Integrated Development of Wildlife Habitats (IDWH).**
- **Project Tiger (PT)**
- **Project Elephant (PE)**

These are umbrella schemes of the sector which aim to extend support to the entire spectrum of actions needed to conserve wildlife in the country. Project Tiger is a scheme which is specifically targeted at areas declared as "Tiger Reserves" and at actions that benefit the cause of wild tiger conservation. In contrast, the other two schemes are more open ended in their approach in that they include areas irrespective of their legal status for strengthening conservation initiatives.

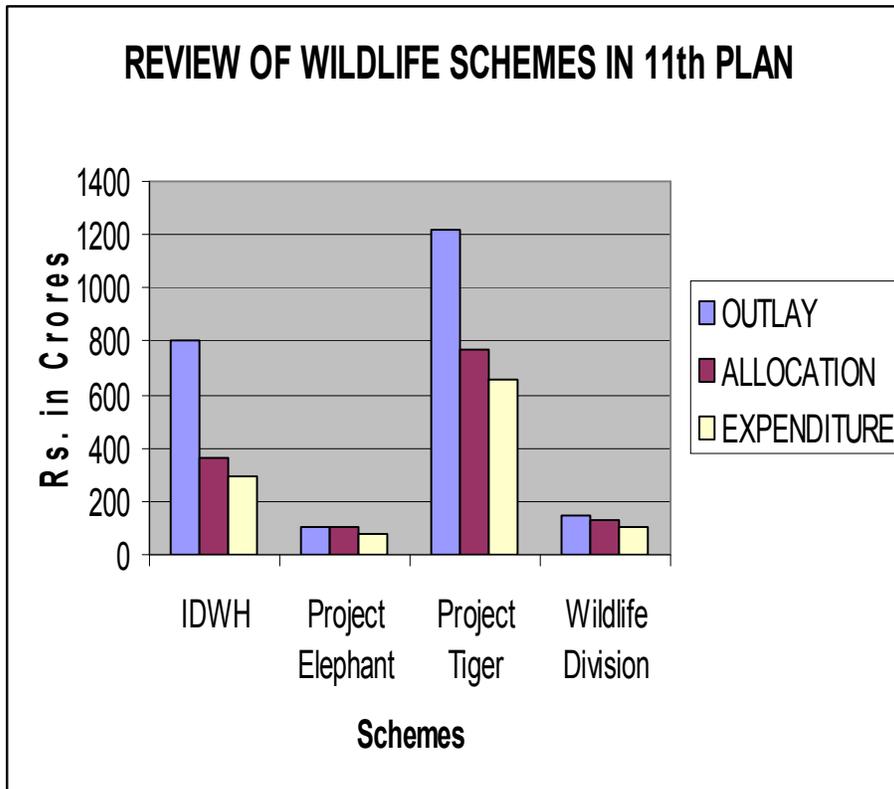
The **Strengthening of Wildlife Division** is a **Central Sector (CS)** scheme that extends support to the Central Zoo Authority, Wildlife Crime Control Bureau as well as for the functioning of the Wildlife Division in the MoEF.

### 1.5 Allocation and Utilization of Funds:

Following is the analysis of these schemes:

Scheme	Outlay for XI Plan (₹ in crore)	Amount Released (₹ in crore)	Expenditure (₹ in crore)	Release as % of Approved Outlay	Expenditure as % of Release
Integrated Development of Wildlife Habitats	800.00	362.00	291.43	45.25	80.50
Project Elephant	102.00	102.00	81.85	100	80.24
Project Tiger*	1216.86	772.28	659.00	54.16	85.33
Wildlife Division	150.00	130.85	100.31	87.23	76.67

\*The Revised Cost Estimate of Project Tiger has also been approved by the competent authority in August, 2011 by enhancing the allocation for the XIth Plan period from ₹650 crore of central assistance to ₹1216.86 crore.



## 1.6 Issues and Challenges for the 12<sup>th</sup> Plan

**1.6.1** A deeper analysis of the implications of this kind of funding support brings out the following critical gaps:

(a) Only 379 of India's 661 PAs (i.e. 57.3%) have received any form of funding support during the 11<sup>th</sup> Plan. Establishing PAs without being able to extend any support to strengthen and improve management practices is a process doomed to fail. Of the PAs receiving support, the sums received are often too meagre to make any meaningful difference on ground. As such, there is hardly any incentive for establishment of Protected Areas.

(b) Given the paucity of resources, the distribution of what is available is lop-sided in favour of a few key priorities and completely misses out on most others. Overall, equally important issues like staff welfare and equipping them better to deal with modern challenges is lost somewhere in between. It is important to emphasise here that these are not mutually exclusive elements of Protected Area management but go hand in hand and ignoring one at the cost of the other is at best a fire fighting measure, likely to have significant long term adverse implications.

(c) There is very limited focus on special habitats such as mountains, wetlands, marine areas and deserts. High value biodiversity areas outside PAs and areas contiguous to PAs/corridors, many of which are included or proposed to be included as Conservation and Community Reserves are also unable to receive due priority under the current scheme of things.

(d) There is no opportunity for innovation or reaching out effectively to regional and other international partners to strengthen conservation.

(e) The states do not have the inclination to provide resources for conservation and the conservation activities are largely dependant on the central assistance.

**1.6.2** Keeping in view the above, **the sector urgently needs reforms and much higher support in order to discharge its roles and responsibilities.** Resources available for the sector today are barely sufficient to carry out the minimum needed to sustain its life nourishing functions, what to say of carrying out innovations or reaching out to a wider constituency. Some examples are highlighted:

a) Most wildlife areas have sanctioned staff strengths identified several decades ago, which is completely unrealistic given present day challenges. On top of this, vacancies of frontline positions continue to remain unfilled for several years.

b) The conditions under which many of our field level staff function is very harsh and demands very high degree of physical and mental fitness. It involves prolonged separation from the family, adding to stress levels. There is no incentive for staff to devote themselves to this kind of tough work and no acknowledgement for any good work done.

**c)** There is very little support for healthcare issues at the field level. A recent study reported in Biological Conservation found that "...malarial infection is a serious hindrance for front-line patrolling staff that limits the time they can spend in the field." In a given Tiger Reserve, "...over a 4-year period (2006–2009), the majority (71%) of forest department staff suffered from malaria. Malaria treatments cost park managers nearly 3% of their total budget and caused a net loss of 44,160 man-hours of anti-poaching effort..... when a forest guard contracts malaria, they must typically contribute the equivalent of 1.5 times their monthly salary towards treatment."

**d)** Several recent reports have expressed concern about the rapid and mostly unchecked decline in wildlife in areas outside the Protected Area Network. A recent study carried out by the Wildlife Institute of India and the National Tiger Conservation Authority reports a decline of 12.6% in tiger occupancy from habitats connecting various Protected Areas in just over four years! This trend needs to be reversed if wildlife is to have a future in India. The mechanism to integrate and sufficiently support wildlife concerns in such areas needs to be strengthened.

**e)** Human Wildlife Conflict is attaining serious dimensions and is already a major concern for long term conservation of several species including the elephant and leopard. In a country of a billion plus people - and still growing - wildlife cannot have a future if they are increasingly seen as adversaries competing for scarce resources. If not addressed swiftly and adequately, human-wildlife conflict can also emerge as a driver for illegal killing of many wild species. Present approaches to manage human-wildlife conflict have mainly focused on mechanical tools coupled with ex-gratia payments. This approach has its limitations in the longer perspective and we need to look for innovative, credible and effective approaches to address this issue.

**f)** Illegal Wildlife Trade has emerged as a form of organised transnational crime and many species in India continue to be targeted for illegal profit. The Hon'ble Supreme Court of India has also raised concern about how avaricious and rapacious persons have destroyed large parts of the wildlife of India by organized crime and brought many wild species to the brink of extinction, thereby seriously jeopardizing and destroying the ecological chain and ecological balance in our environment.

**g)** Many of the social groups and communities traditionally engaged in exploitation of our wildlife including by trapping and hunting of wild species are well identified. It is important not only to wean them away

from such destructive and illegal practices but also to find innovative ways and means to use their field craft and skills to support conservation.

h) Other emerging and relatively poorly understood challenges to wildlife conservation include impacts of **Invasive Alien Species** and climate change. Amongst others, these in turn can influence local and seasonal migration patterns and open newer unwelcome fronts for human-wildlife conflict. As such, this needs to be studied in detail.

**1.6.3** Overall, the biodiversity conservation sector suffers from a **very low place on the priority list of planners and policy makers**. Thus, allocations and forward planning for the sector have not been commensurate with the increased threats and pressures faced. As a result, existing systems and processes are not sufficiently enabled to carry out what is considered the minimum to mitigate such threats. The sector also does not attract sufficient innovation from outside. It is ironic that while public awareness on such issues seems to grow day by day, the ability of the sector to actually influence change and do so quickly is greatly hampered by lack of adequate administrative, financial and legal support. Such apathy is likely to have long term negative implications for the ecological security of the country and its people.

**1.6.4** The 12th Plan needs to adequately address the important issues flagged heretofore. While continuing support to existing initiatives to strengthen wildlife conservation, it also must support innovative approaches. It must visibly demonstrate that the planning process adequately acknowledges the important role of this sector for the sustainable development of the country and match ambition with realistic level of support. Major initiatives including modernization of this sector in a time bound manner, addressing human resource needs, managing and mitigating human-wildlife conflict, strengthening wildlife law enforcement, building incentives for greater community participation in conservation initiatives and integrating research (including beyond Conservation Biology) into management, are some of the key steps envisaged in this direction.

## **1.7 Ecotourism for Livelihoods:**

Ecotourism in and around wilderness areas is seen as an opportunity to provide livelihood opportunities to local communities including tribals and a new vehicle for inclusive growth. Ecotourism more often combines elements of wildlife conservation, cultural awareness, education, recreation and adventure. Ecotourism, therefore, has become an

important conservation tool. As resources bring economic support and strengths, ecotourism provides encouragement to accelerate conservation of resources and also the environment. In such an environment, resources grow and sustain. Ecotourism thus establishes the means to both preserve and develop natural resources in remote areas while generating benefits for local communities.

## 1.8 Priorities for the 12<sup>th</sup> Plan

Based on the above, the following priorities are identified by this Working Group for the 12<sup>th</sup> Plan:

- To declare “Wildlife Management” as a Priority Sector
- Sharpen focus on modernization and strengthening of the wildlife management sector.
- Broaden Management focus to sufficiently include “*less charismatic*” habitats and species as well as areas outside PAs.
- To build inter- sectoral linkages, especially to support resource flow as well as build support for the sector.
- Strengthen linkages with local communities to garner their active support for conservation.
- Address issues like Human wildlife conflicts and loss and fragmentation of habitats *in a Proactive manner*.
- Set out a national framework for ecotourism development to facilitate inclusive growth of local communities including tribals and other marginalized sections of society.
- Strengthen Wildlife Law Enforcement including by supporting strengthening of the Wildlife Crime Control Bureau and building partnerships at the regional and wider international level.
- To encourage innovation and science to support the above.
- To build larger awareness and support for the sector across public, planners and policy makers.

While efforts will be made to incorporate abovementioned priorities in general by streamlining the activities under various existing schemes with due adjustments, there is a need to have a **new scheme** to provide institutional support to the development of **Ecotourism** as a conservation tool and to support local communities in enhancing and improving the quality of their livelihoods.

## 2.0 Recommendations for the 12th Plan:

### 2.1 Wildlife Management as a Priority Sector

Wildlife Management as a sector is unique in many ways. It integrates the best of several disciplines including forestry, soil and water conservation, conservation biology, global information systems (GIS) and remote sensing, human resource management, rural development, conflict resolution & tourism amongst others. In addition, the sector also has a major role as an **enforcement agency**, responsible for carrying out a host of legal functions including land acquisition, prevention of offences, apprehending criminals and prosecuting them in a court of law.

It is also important to note here that being on the concurrent list, while policies and plans can be initiated by the centre, under the federal structure of governance, most implementation issues lie in the domain of the state governments.

Given the multi spectral roles and responsibilities of wildlife managers, the very significant aspect of them as **natural resource managers AND law enforcers** is often overlooked. As a result, unlike other law enforcement agencies, this sector does not get adequate support or any special incentive to carry out its unique, hard and risk prone duties. The obvious impacts are for all to see:

- Most wildlife areas have sanctioned staff strengths identified several decades ago, which is completely unrealistic given present day challenges. To add to this, vacancies for frontline positions continue to remain vacant for several years due to “ban on recruitments” being followed in many states. Agencies like the state police are usually kept exempt from such bans. This has led to a situation where we are trying to manage our resources with an insufficient, inadequately motivated, tired and aged workforce.
- No special planning or devolution of resources for modernisation of the sector has been made available in most states. As a result, the on-ground situation for field level staff is very poor and at places lacks even basic resources.

- Limited opportunities for regular induction and in-service training, especially at the cutting edge.
- No special allowances for field staff are provided, except in Project Tiger areas. Limited support to address issues like health care, prolonged separation from families in field postings, etc. Add to the discouragement of the cutting edge staff.

Wildlife staff in far flung field positions, for example in the higher altitudes of the Himalayas or in the core area of a Tiger Reserve, are working in conditions equally tough or perhaps more severe than those faced by paramilitary or police personnel operating in similar areas. Yet the gap in support available to them is appalling. Over and above, wildlife staff is expected to operate 24x7, round the year, and are at times singly responsible for anything and everything in forest beat sizes of upto 35 sq. km. or even more.

In effect, all this translates into low morale and poor delivery. As a consequence, there is a clear reluctance for new recruits within the sector to opt for wildlife postings. ***This does not auger well for India's precious and unique wildlife.***

**To turn the tide, we must begin by acknowledging the wildlife management sector as a priority.** This acknowledgement by the Planning Commission will help ensure that vacancies in the sector are filled in time, a modernisation plan is put in place and to have a well equipped, well trained and highly motivated force effectively managing wildlife these resources.

### **2.2.1 Integrated Development of Wildlife Habitats' (CSS-IDWH)**

The scope and ambition of this scheme has been considerably enhanced during the last plan period. However, this has not been matched by sufficient resource allocation. In order to sustain the development of wildlife habitats, the group strongly feels that the resource allocation under this head must be considerably enhanced for the 12<sup>th</sup> Plan.

During the 12<sup>th</sup> Plan, the scheme will continue to provide funding support for a wide spectrum of conservation related activities including:

- Support to Protected Areas (National Parks, Wildlife Sanctuaries, Conservation Reserves and Community Reserves) with special focus on Conservation and Community Reserves.
- Priority funding for Conservation and Community Reserves.
- Developing capacity and infrastructure for strengthening coastal and marine conservation initiatives and for protection and management of wetlands and desert ecosystems
- Strengthening protection of wildlife outside the Protected Areas, including anti-poaching activities and strengthening infrastructure support for anti-Poaching and anti trafficking work.
- Recovery programmes for critically endangered species.
- Strengthening wildlife research, education and nature awareness.
- Staff development and capacity building.
- Strengthening wildlife veterinary care.
- Monitoring and evaluation.
- Strengthening staff welfare activities.
- Habitat management and improvement activities.
- Strengthening the co-existence agenda in and around Pas
- Deciding inviolate spaces and consequent voluntary relocation of villages from crucial wildlife habitats.
- Fostering ecotourism.
- Assistance to activities in trans-boundary management of wildlife

**In addition, the scheme would also extend financial support for themes identified for special attention in the 12<sup>th</sup> Plan document including:**

- Recovery Programmes including Project Lion, Project Snow Leopard, Project Bustards and Project Gharial.
- Conservation of marine and coastal biodiversity
- Human Resource development and Modernisation of the sector, including providing minimum standards for infrastructure support to be prescribed by states and modernisation of the Wildlife Sector.
- Human-wildlife conflicts and their effective mitigation.
- Exploring opportunities for weaning away communities traditionally dependant on exploitation of wildlife resources, including hunting, and using their skills to support conservation.
- International and regional cooperation to strengthen wildlife Conservation
- Encouraging innovation and scientific tools and technologies to strengthen wildlife conservation.

- Exploring innovative options for securing financial support for Wildlife Conservation, including from the corporate sector.
- Supporting rapid responses to field emergencies, including constitution of specialised Task Forces and conducting rapid field surveys and actions
- E-monitoring Progress and other impacts: Milestones and **Key Result Areas**

Under this scheme, 100% central assistance is provided for non-recurring items and 50% assistance for recurring items. Mountain regions, coastal zones, deserts, or areas which support certain selected endangered species, are eligible for 100% central assistance for both recurring and non-recurring items. High value biodiversity areas outside PAs, areas contiguous to PAs and corridors are given priority under this scheme. In case of areas outside Government ownership, the State/UT Governments are to be required to sign a MoU between appropriate relevant parties (Panchayats, Communities, Private owners, Government agencies, etc.) detailing the roles, responsibilities, and sharing of costs and benefits, etc. for each party.

It is proposed that this umbrella scheme will have a window to accommodate smaller project proposals, each with an identified outlay component, to enable smooth implementation and monitoring.

## **2.2.2 Saving Critically Endangered Species and Habitats:**

### **2.2.2.1 Project Snow Leopard:**

The Project Snow Leopard, a national project across the biologically important landscapes in the Himalayan high altitudes in the states of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh for conservation of high altitude Himalayan wildlife, will address a very important and urgent need to promote conservation efforts in this biologically, socially, and nationally significant landscape.

#### **Priorities for the 12<sup>th</sup> Plan**

1. Identifying Snow Leopard landscapes on a scientific basis and preparing appropriate Management Plans by issuing guidelines for the same.
2. Streamlining of mechanisms for state-wise disbursement of funds.

3. Greater capacity building, improvement of facilities, and providing "difficult-area" incentives to field staff.
4. Need for a more structured dialogue with the Army and the ITBP, to facilitate a deeper involvement of these bodies in conservation issues in the snow leopard landscapes.
5. Involving international expertise and exchanging know-how on snow leopard conservation.
6. India hosting an international conference on conservation of snow leopards and mountain landscapes.

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#### 2.2.2.2 Project Lion:

In order to further strengthen the last home of the Asiatic Lion, the State Government of Gujarat is implementing a comprehensive project proposal for conservation of Asiatic Lions. This includes activities such as habitat improvement, strengthening of protection, ecodevelopment, nature education and public awareness.

#### 2.2.2.3 Project Bustards

India is home to four species of bustards, the Great Indian Bustard *Ardeotis nigricaps*, Lesser Florican *Sypheotides indica*, Bengal Florican *Houbaropsis bengalensis* and the Houbara *Chlamydotis undulata*. The first three are resident while the Houbara is a migrant. Although all the four species of bustards have been placed in Schedule I of the Wild Life (Protection), Act 1972, their numbers continue to decline at an alarming rate.

Bustard species can be considered indicators of grassland ecosystems and by conserving the bustards and their habitats, a very large number of species dependent on healthy grasslands will also be protected.

Given the critical significance of grassland ecosystems, and the Bustards as flagship species of these ecosystems, there is a need to launch a "Project Bustards" across the country to suggest conservation measures for all four species of bustards in India, along with the involvement of local communities living in and around their habitats.

#### 2.2.2.4 Gharial Conservation:

The **gharial** (*Gavialis gangeticus*) is **the most critically endangered large animal in India**, much more so than even the tiger the elephant, Indian rhino or the snow leopard.

It is included in Schedule I of the Wild Life (Protection) Act, 1972, Appendix I of the CITES and Critically Endangered in the IUCN Red List of Endangered Species. Recent assessments indicate that less than 1,400

individuals survive in the wild today in India, with less than 200 breeding adults, most of which are found in Chambal river and some populations in the isolated pockets of Girwa river (Katarniaghat Wildlife Sanctuary) and Ramganga, Son and Ken Rivers.

Gharial conservation will receive special attention during the 12<sup>th</sup> Plan.

### **2.2.3 Communities and Conservation:**

If wildlife in India continues to survive and flourish, a large part of the credit goes to local communities, who have fostered a very close relationship with wildlife as part of their social and cultural ethos and are generally very tolerant of wildlife around them. This tolerance is being increasingly stretched to its limits in various places due to loss of life and property attributable to wildlife. In order for wildlife to continue to flourish, this relationship between people and wildlife should not only be understood better but also acknowledged and strengthened further, making local communities active partners in the management of such resources. Various activities are to be carried out to address this relationship of wildlife and local communities.

#### **Exploring opportunities for weaning away Communities traditionally dependent on use and exploitation of Wildlife Resources including hunting and using their skills to support conservation.**

There is an urgent need to launch a rehabilitation and development programme for various communities and tribes traditionally known to be involved in illegal exploitation of wildlife resources including hunting. Many of such communities and tribes live around and operate in some of India's best known tiger reserves and have the potential to severely undo years of good management efforts with their hunting skills.

### **2.2.4 Human Wildlife Conflict:**

Growing Human Wildlife Conflict is another urgent theme that needs to be addressed on a priority as this is slowly but surely chipping away at the foundations of local community support for conservation initiatives. Past efforts in this direction have largely looked at mechanical means of checking wild animals and at providing ex-gratia support. The time has come for the wildlife managers to look for more innovative and sustainable options to address this issue.

The following key principles are emphasised here:

✦ Conflict will not necessarily always increase, however inappropriate management (of people and wildlife) could lead to an increase in conflict

✦ Lack of understanding (and appropriate research) on conflict is a crucial gap at present. Therefore research targeted at how to reduce the problem has to be encouraged.

✦ There has to be serious input on how to mitigate the losses local people face due to depredation of crops and livestock to wild animals. This needs to look beyond the usual trenches and fences approach to include other innovative measures such as alarm systems, insurance schemes, quicker disbursement of ex-gratia including by taking support from local NGOs.

✦ **Trainings in conflict resolution must form an integral part of training for this sector** across the board, from the Forest/Wildlife Guard to the IFS officer.

✦ In addition, **there is need to strengthen existing capacity to carry out Translocation of wildlife from high conflict areas.** Translocation has to be carried out on the basis of logical and well thought out management decisions backed by scientific studies and not subjective judgments about wildlife having “exceeded the carrying capacity of the habitat”.

✦ **The decision to capture an animal from the wild should be the last option.** It is very important that human intervention is restricted to the minimum to avoid future conflict. If the captured animal is to be released, it should be in the immediate vicinity of capture, i.e., within animal's home range.

✦ There is an urgent need to ensure that there are **Emergency Response Teams** in place to assist the Forest Departments and Police at district levels, to ensure that there is an effective response to human-animal conflict situations. A district-wise list of fully functional wildlife conservation and animal welfare organisations across India, who can support this can be drawn up for this purpose, based on their record and experience. The central and state governments should equip and fund these Rapid Response Teams with a vehicle, nets, trapping and transport cages, tranquiliser guns, etc., so that they can effectively act and assist the authorities whenever the need arises.

✦ **We have to deal with people affected by human wildlife conflict on a priority in a more sensitive, transparent and professional manner.**

### 2.2.5 Strengthening Veterinary Support:

Healthcare issues related to wildlife are attaining a great significance today. Yet this is one aspect where little seems to have done so far. This is equally true for wild animals as for captive animals. A series of key steps are to be taken during the 12<sup>th</sup> Plan to strengthen this aspect of management. These would include establishment of a cadre of trained wildlife veterinarians in the Forest Departments, create Wildlife Health Centres in selected veterinary colleges and the IVRI, Bareilly, with state of the art infrastructure and a clear mandate and establish institutional linkages with the ICAR run National Network Programme on wildlife health issues. The Forest Departments should work out an institutional arrangement where Veterinary Doctors may be invited to serve on deputation for extended periods with PAs or in zoos, while providing due incentives for such persons. Equipment such as blowpipe sets, tranquilising guns, drugs and other supporting equipment such as safety equipment, harnesses etc. should be procured and made available to each PA. Regular training and safety drills should be carried out under supervision of expert veterinarians.

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### 2.2.6 Human Resource Development and Modernisation:

Human Resource is the key to the success of an organization. The capacities and capabilities of its personnel determine the effectiveness of the organisation.

While Forestry as a whole does not itself receive sufficient attention and acknowledgement for its contribution to the nation, the position of the wildlife conservation sector is even worse. A key indicator is the situation with respect to the foot soldiers of conservation. Little has changed over the years for the frontline staff to enable them to do full justice to the roles and responsibilities vested upon them.

The 12<sup>th</sup> Plan will provide support to address the following on a priority:

1. A review of the beat sizes across the country, mainly to ensure that no forest/wildlife beat guard is required to be in charge of an area larger than 15 sq km.
2. An order to be circulated to the state governments that vacancies in all front line staff posts to be filled on a priority and time bound basis.

3. Personnel with specialization should be posted to such specialized jobs on a priority basis.
4. Special Allowances for ALL staff working in the wildlife wing, as an incentive and acknowledgement of their special contribution.
5. Special additional health and life insurance cover for field staff in keeping with the tough and risky nature of their assignment. Tie-ups with government and private medical facilities for regular health check-up for all levels of staff.
6. Residential accommodation for the families of frontline staff to be provided in nearby towns/villages on a priority basis. Costs towards establishment and upkeep of such Field Hostels to be met from special provisions made for modernisation of the sector.
7. Minimum standards for infrastructure support to be prescribed by states and met with support from the Planning Commission. These would take into consideration local factors (e.g. a double storied construction in elephant areas, sun facing design in high altitude areas, water harvesting from roofs, etc.) and aim to provide a basic dignified quality of life to our field level staff.
8. States are encouraged to use the guidelines granting forest staff immunity from vexatious criminal proceedings as issued by the Govt. of Assam as a model, where such guidelines do not exist or are considered not adequate, to issue comprehensive guidelines on similar lines.
9. Institute **a system of national awards for wildlife officials and staff** on the lines of similar awards and commendation for other enforcement agencies such as the Police, to acknowledge and motivate achievers in the sector.

#### **2.2.7 International and Regional Cooperation to Strengthen Wildlife Cooperation:**

India is party to several multilateral and bilateral International conventions, agreements, forums and coalitions related to wildlife conservation. India also has bilateral arrangement with neighbouring countries, namely, the Indo-Chinese Protocol on tiger conservation and an MOU with the Government of Nepal on wildlife/tiger conservation/protection. Similar agreements are being processed with Bhutan and Bangladesh. India has also facilitated the creation of the

South Asia Wildlife Enforcement Network (SAWEN) and is the present chair of the Global Tiger Initiative (GTI).

As a mega bio-diverse country, India takes its roles and responsibilities at such forums very seriously. The 12<sup>th</sup> Plan will allocate separate resources to enable the country to meet its roles and obligations.

### **2.2.8 Encouraging Innovation and scientific tools and technologies to strengthen Wildlife Conservation:**

India is an emerging technological giant. The widespread use of technological innovations and how they have impacted our society is there to see at every step.

Amidst all this, technological advancement seems to have side stepped the wildlife conservation sector. Except for isolated instances, the ways things are managed at the field level are still reminiscent of several decades ago. An easy check is a look at the way a wildlife/forest guard works in his outpost today.; Technology has not made his daily tasks any simpler, despite the immense potential to do so. Research and monitoring has taken advantage of tools such as camera traps and radio or satellite collars but the overall use of modern technology in the wildlife conservation sector is minimal.

During the 12th Plan, MoEF will establish a mechanism to facilitate field based innovations that strengthen wildlife conservation. These could include:

- Use of remotely operated devices to monitor human presence/activities in field areas.
- Better equipment and tools for use during patrolling or for communication.
- Design of water delivery systems for anti-poaching camps and waterholes in various terrain conditions.
- Renewable energy sources for camps and while on the move.
- Green Infrastructure
- Alternate cropping models as tools to mitigate crop losses due to wildlife.
- Improved healthcare monitoring and support for field staff.
- Safety equipment to deal with wildlife rescue and rehabilitation.
- Tools for recording & processing scenes of wildlife crime and for scientific collection of evidence.

### 2.2.8 National Tiger Conservation Authority:

As India's longest running flagship species conservation programme, **Project Tiger** has few parallels across the world. Since its launch in 1973 in nine reserves of different States (Assam, Bihar, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Uttar Pradesh and West Bengal) over an area of approximately 14,000 sq. km. Project Tiger now covers an area of around 46,388.22 sq.km. in 17 tiger States with 32578.78 sq.km. of notified core/ critical tiger habitats in 16 tiger States.

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Considering the challenges facing tiger conservation, Project Tiger has been converted into a statutory authority, **National Tiger Conservation Authority (NTCA)** by providing enabling provisions in the Wild Life (Protection) Act, 1972 through an amendment, viz. Wild Life (Protection) Amendment Act, 2006. This forms one of the urgent recommendations of the Tiger Task Force appointed by the Prime Minister.

#### Thrust areas for Tiger conservation during the 12th Plan period

1. **Stepping up protection** by supporting the States for raising, arming and deploying the Special Tiger Protection Force (so far, the STPF has been constituted only in Karnataka for Nagarhole; funding support has been provided to UP, Uttarakhand and Rajasthan where process of constituting the same is ongoing. Funding has also been provided to Orissa for STPF constitution at Similipal Tiger Reserve).
2. **Need for enhanced funding support to States for voluntary village relocation** from core areas to provide inviolate space for tigers (800-1200 sq.km.) for a viable population (CCEA process ongoing).
3. **Strengthening infrastructure and habitat management.**
4. **Use of information technology** in wildlife crime prevention.
5. **Capacity building** of field personnel.
6. **Addressing man-wildlife conflicts** to prevent revenge killings.
7. **Addressing the issue of livelihood dependency** in the fringes of core/critical tiger habitats by supporting the States for managing the buffer/peripheral areas of tiger reserves as a multiple use zone through village level participatory planning for ecodevelopment with reciprocal commitments (out of 40 tiger reserves 25 have notified buffer area).

8. **Launching Phase-IV** tiger reserve level continuous monitoring with capacity building.

9. **Active management** involving translocation of tiger to suitable low density tiger habitats within a landscape.

10. **Supporting field oriented research work.**

11. **Strengthening the Regional Offices** of the NTCA at Nagpur, Guwahati and Bengaluru (AIGs posted at Nagpur and Bengaluru Regional Offices; IGFs are required to be posted in the 3 Regional Offices, besides an AIG at Guwahati).

12. **Declaring and consolidating new tiger reserves** (6 have been given in-principle approval, and for another 6 the States have been advised).

13 **Fostering awareness / supporting reserve specific communication strategy** to elicit public support for tiger conservation with the active involvement of Panchayati Raj institutions.

14 **Strengthening the basic infrastructure at NTCA / Project Tiger Headquarters**

15 **Continuing Independent monitoring and evaluation of tiger reserves:**

During the 12<sup>th</sup> Plan, a bulk of the resource allocation for this scheme will be utilised for carrying out voluntary village resettlement to make the core areas inviolate.

### 2.2.9 Project Elephant:

The Asian Elephant has been notified by the Ministry of Environment and Forests, Govt. of India as the National Heritage Animal. Its conservation will receive special attention during the 12<sup>th</sup> Plan.

It is important to note here that **more than two of every three rupees spent on elephant conservation deals directly or indirectly with human-elephant conflict.** On an average nearly 400 people are killed annually by elephants and about 100 elephants are killed by people in retaliation. Elephants annually damage 0.8 to 1 million hectares of crops. As such, dealing with Human- Elephant conflict will have to be the cornerstone of any new initiatives for elephant conservation.

The following will be the key aspects under this project:

- 1) **Declare Project Elephant a statutory authority** through an amendment of the Wild Life (Protection) Act with administrative powers and legal backing to ensure elephant conservation. The new body maybe called the National Elephant Conservation Authority (NECA).
- 2) Elephant Reserves should also be notified as **Ecologically Sensitive Areas** under the Environment Protection Act. This will help provide safeguards against changes in the landscape without harming pre existing rights.
- 3) ~~All the elephant corridors identified and agreed to by Project Elephant and state governments should be notified as state elephant corridors by the respective states.~~
- 4) The NECA should establish a National Elephant Mortality database which should be shared with enforcement agencies at regular intervals on a regional basis.
- 5) Establish conflict management task forces that will work in priority identified areas of high conflict. The Conflict Management Task Forces will begin work in sites identified by the Elephant Task Force. This scheme will be funded by the NECA and will be a permanent programme to mitigate and significantly reduce conflict on a continuing basis.
- 6) Establish an Asian Elephant Forum on the lines of the Global Tiger Forum, with immediate priority for securing of trans-boundary elephant landscapes.

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#### **2.2.10 Wildlife Institute of India:**

The Wildlife Institute (WII) is well acknowledged as the premier institution in this sector, not just in India but also for South Asia and beyond. The institution, the only one of its kind in South Asia & SE Asia, will need to constantly upgrade and reinvent itself in order to realistically meet the present and emerging challenges in this sector. For this, greater support is needed for this institution.

WII, with its sound foundation in wildlife sciences, needs to respond to various emerging challenges in wildlife conservation adequately by implementing innovative approaches to manage wildlife resources in the

country. The training, research, advisory and advocacy role of WII accordingly needs to be appropriately enhanced to meet these challenges in the XII five year plan. The new approaches would include developing framework for mainstreaming conservation in development projects and policies, carrying out empirical studies on ecological impacts of developmental projects and human activities, strengthening common property resource management and developing expertise in managing wildlife in isolated, fragmented patches across landscapes. The use of modern tools and technology and development of analytical capabilities are critical ingredients for achieving success in this endeavour. The Institute has developed a range of 'knowledge products' in form of guidelines, manuals, species conservation plans, species identification protocols both morphometry and DNA based. These products are being used by a number of agencies for strengthening the wildlife conservation and management scenario in the country. In the fulfilment of its mandate, the Institute has greatly benefited from a range of collaboration at the national as well as international level with various agencies and institutions.

The Institute now needs to be taken to the next higher level of trajectory during the XII Plan period so as to meet the 'emerging' challenges in the field of wildlife research, conservation and management. These initiatives have to be backed up by rigorous research and science and technology applications and are as follows: (i) Establishment of a National Wildlife Forensic Research Facility; (ii) Development of Protected Areas Geodatabase at Enterprise Level; (iii) Development of Wildlife Health and Disease Research and Monitoring Facility; and (iv) Remote Monitoring of Wildlife Populations.

#### **2.2.11 Strengthening of Wildlife Division and Consultancies for Special Tasks/Control of Wildlife Crime:**

This umbrella scheme of the MoEF provides support to various projects and programmes including the WCCB, the CZA and the NZP. In addition, it also provides support for conducting various special initiatives and emergency responses to wildlife crisis or special situations across the country.

As part of the activities to strengthen management of our Protected Areas, a National Parks Congress be organised every two years which would bring together field managers and other stake holders from across India's Protected Areas on a common platform, to share best practices

and learn from experts. Expenses towards this would be met from the allocations for support to this scheme.

In addition, any requirements for Rapid Responses including hosting Crisis Management meetings, field visits, or conducting short term studies to meet any emergent wildlife situations may also be met from allocations under this scheme.

## 2.2.12 Wildlife Crime Control Bureau (WCCB)

The Wildlife Crime Control Bureau (WCCB) was established on 6<sup>th</sup> June 2007 as a statutory body under the Wild Life (Protection) Act, 1972 to combat organized wildlife crime.

The powers and functions of the Bureau are defined u/s 38z of the Act to include: collection and collation of intelligence related to organized wildlife crime, dissemination of such information to States and other enforcement agencies for immediate action to apprehend criminals, establishing a centralized wildlife crime data bank, co-ordination with various enforcement agencies of the Centre and States, implementing obligations under various international conventions and protocols, providing assistance for coordination of multilateral and bilateral actions for wildlife crime control, developing infrastructure and capacity for scientific and professional investigation into wildlife crime, assisting State governments in ensuring successful prosecution of wildlife crimes, advising the Government of India on issues relating to wildlife crime having national and international ramifications, and suggesting changes required in relevant policy and laws from time to time.

The Bureau has since become operational with its Headquarters at Delhi and 5 Regional offices (Delhi, Mumbai, Chennai, Kolkata & Jabalpur), 3 sub-regional offices (Guwahati, Cochin & Amritsar) and 5 border units (Moreh, Nathula, Motihari, Gorakhpur & Ramanathapuram).

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The following are the priorities identified by the WCCB for the 12<sup>th</sup> Plan:

**1. Strengthening of wildlife forensic capabilities:** WII is currently being approached by the wildlife crime enforcement agencies to meet their forensic needs. One such institute can't cater for the requirements for whole country. General crime forensic laboratories (FSLs) exist all over the country under MHA and State governments. Separate wildlife crime forensic unit will be created in selected existing FSLs in the country by providing financial support in creation of required infrastructure.

**2. Capacity building in scientific investigation:** WCCB will develop special training modules on various aspects of wildlife crime investigation and provide such modules & training literature to the existing training institutes of police, forest and customs departments to integrate with their regular in – service training courses. The Bureau will also assist in improving their training infrastructure and sponsor specialist resource persons & trainees for TOT courses. WCCB will also set up WCCB Training Centre.

**3. Establishment of National Wildlife Crime Data Base:** Bureau will establish wildlife crime and criminal data network by linking the Chief Wildlife Warden offices in the States with the WCCB HQ. The Bureau will help in terms for hardware/software supply and training of the personnel.

**4. Public awareness campaign:** It will run public awareness campaigns in wildlife rich areas in cooperation with local agencies and Panchayati Raj Institutions.

**5. Creation of National Fund for wildlife crime control and infrastructure development for State agencies on cost sharing basis.**

Given the emergence of wildlife crime as a form of organised transnational crime, there is need to extend the reach and the effectiveness of the WCCB by building on its infrastructure and reach.

#### **2.2.13 Central Zoo Authority:**

The Central Zoo Authority (CZA) was established in 1992 to manage and regulate zoos in the country and to control mushrooming of ill-conceived/ill planned zoos & rescue centres. It was also to monitor and evaluate the existing zoos & captive animal facilities and to suggest ways and means for the improvement of zoos in the country, so that they can be transformed into effective & potent centres for the ex-situ conservation of endangered wild fauna.

#### **Proposals to be supported during 12th Plan Period**

Brief descriptions of the activities to be taken up during 12th Plan Period are explained as under:

- (a) Preparation of Master Plan for long term development of zoos**
- (b) Development of Zoos (appropriate housing for animals)**
- (c) Maintenance of Rescue Centres**

The CZA has created seven Rescue Centres for rehabilitation of lions, tigers, leopards, bears and monkeys whose performance has been

banned in circuses. Due to increasing human-wildlife conflict, zoos across the country have also been continuously receiving injured & orphaned animals for immediate housing. This puts additional responsibility on the zoos which are already stressed.

Due to over-extended resources with existing government agencies that deal with wild animal rescue, a number of NGOs have increasingly taken an active role in this field, establishing animal rescue centres across India. The social service and contribution by NGOs in this field needs to be encouraged and supported by the government. Financial support should be provided by the Ministry through the Central Zoo Authority of India and the Animal Welfare Board of India, as well as state governments, to existing wildlife rescue centres run by NGOs, both for capital and operational expenditure.

There is also an urgent requirement for assistance to expand and establish animal rescue centres, veterinary hospitals, clinics and infrastructure, as well as district-wise Rapid Response Teams wherever possible, in collaboration with NGO's with a proven track record in the relevant field.

**(d) Research and Record Keeping**

Coordinated, planned conservation breeding of critically endangered wild animal species in the zoos

**(e) Capacity building of zoo personnel and awareness**

**2.2.14 National Zoological Park**

The National Zoological Park (NZP) is the only zoo being directly administered by MoEF. In all respects it is a showcase of the MoEF. The status and condition of the NZP has an important bearing on the image of the MoEF. Despite all the good intentions the growth of Delhi Zoo has been haphazard and disorganised over the years in the absence of a comprehensive master plan. Today, this facility needs major overhaul to regain its lost glory.

The Strategy for this is as follows:

1. Develop excellence in core activities viz. animal care and upkeep, conservation breeding and research.
2. Outsource peripheral services such as sanitation, security, etc.
3. PPP approach to build and operate stand alone facilities.
4. Strengthen and upgrade human resources.
5. Strengthen and upgrade organisational structure.

6. Upgrade infrastructure and services.
7. Establish NZP foundation to generate resources to augment

## **2.2.15 Other Important Themes for Consideration:**

### **2.2.15.1 Effective Fund Devolution:**

The issue of timely and adequate devolution of funds to field formations has always been considered the major limiting factor for successful implementation of various plans and projects. Report after report has flagged the concern about the unsatisfactory process of allocation of funds to the field. Yet, nothing changes at the field level.

This state of affairs has to be seriously addressed and rectified by the Gol.

In addition, there is need to reconsider the status of the scheme, Integrated Development of Wildlife Habitats (IDWH). In its present form, this is a Centrally Sponsored Scheme-CSS, whereby fund flow to the various Protected Areas or other entities is generally routed through the respective State Finance Department, often leading to delays. If the scheme is converted to a Central Sector scheme- CS, funds can be released directly to the SFDAs/FDAs or even to the respective Park/Sanctuary Foundation cutting on unnecessary delays. This will lead to better resource management, improve delivery at the field level, promote better monitoring and improve transparency. As such, this is strongly recommended.

### **2.2.15.2 Prioritising Protection of Wildlife outside PAs**

PAs are crucial for our biodiversity, operating as repositories of our natural heritage. However, wild animals do not follow human-made boundaries.

A significant number of our wildlife populations, including that of many threatened and endangered species, are found outside our Protected Area network, in areas including Reserved Forests, Revenue Forests and Lands, Village Forests and commons, Private Forests and Lands, and Community Areas. Such lands can also act as corridors, connecting wildlife habitats. It is seen that such areas are extremely vulnerable both from the perspective of high mortality of wildlife as also very high human-wildlife conflict.

Across India, there are several community led initiatives and efforts that support ground level conservation. Such initiatives may exist across a wide spectrum of legal regimes ranging from government owned lands to

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privately owned lands and may include areas not formally notified as under any formal protection regime. Such programmes should be actively encouraged and supported through funding under this scheme.

Forest Areas harbouring important wildlife species or identified as critical corridors, particularly those immediately in the vicinity of PAs, should receive support on a priority basis for building capacity, including appropriate infrastructure for wildlife protection in these areas.

Working plans for Forest Areas, especially those in the vicinity of PAs, usually do not give adequate significance to wildlife conservation issues in their planning process. The Working Plan code prescribes that all Working Plans are to have a section on wildlife conservation, which is to be developed under the guidance of the Chief Wildlife Warden. This should be given due significance, and not just as a matter of routine, so that the broader goals of maintaining landscape integrity and viable populations of wildlife, as well as to reduce human-wildlife conflicts are adequately addressed.

### **2.2.15.3 Mainstreaming Conservation in the plans and activities of other stakeholders including Line Departments and other Government Agencies**

*“Protected Areas (PAs) often depend on landscapes surrounding them to maintain flows of organisms, water, nutrients, and energy. Park managers have little authority over the surrounding landscape although land use change and infrastructure development can have major impacts on the integrity of a PA. The need for scientifically-based regional-scale land use planning around protected areas is acute in human-dominated landscapes to balance conservation goals with livelihood needs for fuel wood, fodder, and other ecosystem services.”<sup>1</sup>*

It is suggested that agencies/departments/institutions which have a direct impact on land use in such landscapes be asked to contribute ideas towards formulation of a Perspective Plan, over a 10 year cycle aligned with two National Plan cycles, which addresses the priorities set by such

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<sup>1</sup> Karanth, K, DeFries, R. 2010. Interactions between protected areas and their surroundings in human-dominated tropical landscapes. *Biological Conservation* 143 (2010) 2870-2880

departments and suggests appropriate steps to integrate wildlife concerns in such planning.

#### **2.2.15.4 Policy and Legal Issues**

The Wildlife (Protection) Act, 1972 is the umbrella legislation for wildlife conservation in the country. The Act has been amended in the years 1982, 1986, 1991, 1993, 2002 and 2006 to keep pace with the changing dynamics of wildlife law enforcement and management.

A new amendment is likely to be presented before Parliament during 2011 for its consideration. The proposals of this proposed amendment include the following salient features:

1. Provisions for constitution of a 'National Elephant Conservation Authority', in order to provide for a stronger organizational framework to 'Project Elephant' and enable the Central Government to prescribe statutory directives and norms with respect to management of elephants and its habitats.
2. Inclusion of a new chapter in the Act in consistence with the provisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The terms, phrases and definitions etc. in the Chapter would have the same meaning as these have in the Convention. As one of the earliest members of the Convention, it is a much needed step for India to bring in relevant legislation to facilitate implementation of CITES.
3. Enhanced penalties for wildlife offences.
4. Statutory prohibition on the use of animal traps, commonly used for poaching.
5. Facilitation of scientific research on wildlife.

In addition, there are several key policy issues that have been identified for attention.

#### **2.2.15.5 Exploring Innovative options for securing financial support for Wildlife Conservation**

Given that India is a country with over a billion people and myriad priorities competing for limited resources available with the government, there will always be a paucity of resources for a sector like wildlife conservation. As such, there is urgent need to look for innovative options for securing additional financial support for Wildlife Conservation.

However, it needs to be clarified here that such innovative funding options are to be seen as additionality rather than as an alternative source of funding. Too often in the recent past, it has been seen that

whenever additional resource streams are identified, it is seen as an opportunity to reduce other available funding.

Corporates, NGOs, the Nature Based travel Industry, individuals and public institutions, even existing Government schemes such as CAMPA can be a source of support for this sector. However, to ensure proper utilization of such resources and maintain transparency and credibility, details of such funds received and activities carried out under them should be placed in the public domain on a regular basis after independent audit.

#### **2.2.15.6 Monitoring Progress:**

Monitoring and Evaluation are an integral part of the process of implementation of various project components. They will receive special attention during the implementation of various schemes during the 12<sup>th</sup> Plan. Use of modern scientific tools and technologies including use of GIS platforms and time series satellite data will be promoted to quantify change and promote transparency.

#### **2.2.15.7 Building Synergies for Improving Effectiveness:**

Wildlife Management as a sector has clear, established linkages with several other sectors, agencies and ministries which have the potential to impact this sector in both a positive and negative manner. Some of the sectors with which wildlife management has a direct linkage would include Rural Development, Tribal Welfare, Tourism, Water Resources, Renewable & Non Conventional Energy, Roads, Irrigation and Education etc.

Conscious and proactive efforts will be made to strengthen such sectoral linkages by reaching out to such sectors in a spirit of partnership and transparency.

#### **2.2.15.8 Building greater Public Support for Wildlife Conservation:**

Public perception about this sector is mixed, often based on misconceptions and half truths. This is also because of the inherent nature of the sector, most of whose activities take place away from the everyday gaze of common citizens. The contribution of this sector is also not distinctly perceptible to most people. As such, the sector has so far largely remained a closed one, seen as working in glorious isolation. This perception must change, and quickly. The sector has a tremendous opportunity to leverage external support including from a large number of NGOs with a proven track record, like minded corporate and other

institutions and entities which can provide support across a diverse sphere of activities including building awareness and harnessing public opinion for wildlife, resource mobilisation, research, rescue and rehabilitation, monitoring and strengthening wildlife law enforcement. The concerned government agencies should be encouraged to reach out to such agencies to seek their collaboration and support as per clearly defined roles and responsibilities, to bring greater strength and synergy to the sector. A set of well targeted awareness campaigns need to be rolled out to share various facets including challenges facing the sector and its contribution to the larger public good.

### 3.0 Ecotourism for livelihoods:

Tourism is globally recognised as one of the fastest growing industries. Ecotourism being a non consumptive use of natural resources is one of the most effective ways to ensure development hand in hand with conservation. Ecotourism is evolving as a significant tool of "inclusive growth" benefitting the local people, tribal and forest dwelling community. Thus there is an urgent need to have a holistic national framework and funding support in an ongoing manner for developing ecotourism as a source for conservation and livelihood.

Ecotourism ('ecology' and 'tourism'), draws upon natural, human-made and cultural environments. Ecotourism is travel to experience natural environments or settings. Ecotourism (i) Avoids negative impacts that damage or destroy the natural or cultural environments being visited; (ii) Educates the traveller on the importance of conservation; (iii) Directs revenues to the conservation of natural areas and the management of protected areas; (iv) Brings economic benefits to local communities and directs revenue to local people living adjacent to protected areas; (v) Emphasizes need for planning and sustainable growth of tourism and seeks to ensure that tourism development does not exceed the social and environmental "capacity"; and (vi) Retains majority revenue in the local community by stressing the use of locally-owned facilities and services.

In India ecotourism is still in a developing stage and faces a lot of challenges. Ecotourism more often combines elements of wildlife conservation, cultural awareness, education, recreation and adventure. Ecotourism, therefore, is gaining importance as a tool for conservation.

The need of the hour is an all-inclusive strategy keeping in view the scope of the industry and the challenges to overcome. Looking at the vast potential, ecotourism has been categorised in four major areas, i.e. Protected Area based Ecotourism, Ecotourism in Forests outside Protected Areas, Village based Ecotourism, and *Ex situ* Conservation Areas (Ecological Gardens, Zoological Parks, Botanical Gardens and Biodiversity Parks). This categorisation will help to have a focussed approach based on the requirements of specific areas and needs of stakeholders.

Institutionalisation of ecotourism will require stimulating legal framework, policy enforcement mechanisms, institutional setup and lot of investment. A proper institutional framework will have convergence with various schemes and other departments, incentives, rewards and proper monitoring systems.

Various operational models can be practised in this sector, involving government departments, private sector, communities and other stakeholders. Ecotourism should be sustainable and therefore an appropriate business / revenue model can prove to be beneficial both to the community and ecotourism destinations.

Ecotourism being a contemporary approach to conservation, a lot of research has to be undertaken in this sector which will require a futuristic road map and comprehensive planning.

### 3.1 Major Potential Areas

The following are identified as major potential areas for ecotourism:

- a) **Protected Area based Ecotourism:** This category comprises of all ecotourism relating to PAs (National Parks, Sanctuaries, and Tiger Reserves).
- b) **Ecotourism in Forests outside Protected Areas:** This category comprises all ecotourism in Reserved Forests, Protected Forests, and other Government owned 'forest lands' (as defined under the Forest Conservation Act, 1980) outside of Protected Areas.
- c) **Village based Ecotourism:** This category comprises all ecotourism that centres on village landscapes, some natural formations, such as private forests or private land near Protected Areas, lakes, coral reefs, waterfalls, etc., and managed by local individuals or communities.
- d) **Ex situ Conservation Areas (Ecological Gardens, Zoological Parks, Botanical Gardens and Biodiversity Parks):** This category covers conservation areas that are largely managed by the Central Zoo Authority (CZA), Botanical Survey of India, and Forest Department.

### 3.2 Operational Models

Ecotourism products and services have to be focused upon for providing unique experience to the visitors. These can be operationalised through various models. Some of the models already been practiced throughout India are as follows:

#### **Departmental (Boards or Corporations)**

In this model the investment, operation and management of the destination will be done by the department. The entire operations will be managed departmentally. The Forest Committees can be involved on the

pattern of JFM / FDA. This model can be worked out in RFs and PFs where issues regarding land conversion and land rights persist.

### **Joint Venture with other departments**

Different departments are involved in establishment, operation and management of the ecotourism destinations. Tourism Department having the expertise in hospitality industry can help initiate the destinations and work in synergy with the state level bodies implementing ecotourism.

There can be various business models within this framework with investment partnerships, functional partnerships or land / property lease to the departments.

### **Public Private Partnership/ Corporate Social Responsibility**

PPP is a project based *Concession Agreement* (a structured contract) between a government entity and a private entity, to create and / or manage infrastructure for public purpose, for a fixed time-frame, on commercial terms, and assets revert to government on end of contract. There are two models under this framework which include:

1. Long term partnership for ecotourism infrastructure (Build Own Operate Transfer) on non-forest lands
2. Contracting the operations of the destination (Operational Management Contract)

The corporate world can also be involved in this mechanism through Corporate Social Responsibility. The areas for ecotourism development can be taken up by them for investment and establishment.

### **Community based Ecotourism**

CBE includes Ecotourism enterprises that are owned and managed by the community and involves conservation, business enterprise and community development. There can be various models within this framework like:

1. Self- Initiated and community managed, e.g. Kokkrellur, Karnataka
2. NGO Initiated and community owned, e.g. Rampuria, Darjeeling; Pastanga, Sikkim
3. Co-managed i.e. Community Managed and Government Supported, e.g. Bamboo Groves, Kerala

If ecotourism is to be sustainable and truly benefit local communities, then it is necessary that local people are trained and empowered as stakeholders in ecotourism enterprises, rather than just being offered employment. Schemes that provide training to local people must be

implemented. Additionally, schemes of positive discrimination in favour of local ownership of ecotourism enterprises must also be implemented. Local people can develop expertise as guides, provide accommodation, own vehicles and set up local handicrafts outlets to earn revenue from ecotourism. Some of the areas wherein locals can be involved are as follows:

**i. For Ecotourism Entrepreneurship in Protected Areas**

The locals can be involved in guiding, homesteads, local service outlets (vegetable hawkers, cobblers, mechanics, cleaners, etc.), souvenir shops, arts and handicrafts, vehicle owners and drivers, conducting ecotourism activities (boating, cycling, nature trail, etc) and other Park management activities.

**ii. For Ecotourism Entrepreneurship in Forests outside Protected Areas**

The locals can be involved right from the planning stage, helping in developing the site ecotourism plan acting as field resources. They can act as entrepreneurs running activities like cafeterias, arts and handicrafts outlets, performance arts groups and other ancillary activities. For employment, they can be employed as guides (for nature and cycling trails), boatmen, managers at interpretation centers, helping staff for cafeteria, adventure activities, etc.

**iii. For Ecotourism Entrepreneurship in village areas**

In village areas the villagers can collaboratively work for development of entire site and run homesteads. Small homesteads (with 3-4 rooms) where local people provide accommodation to tourists in their own houses may be promoted. They can act as local tour operators who can organise tours and packages for tourists including exposure visits to their farms, sacred groves, NTFP centers, etc. They can operate traditional centers for publicizing their culture, traditions, arts, crafts, foods, etc.

**iv. For Ecotourism Entrepreneurship in Ex situ Conservation areas (Ecological Gardens, Zoological Parks, Botanical Gardens, Eco-Parks and Biodiversity Parks)**

In such areas locals can be involved in maintenance jobs like gardeners, cleaners, field staff, guards, caretakers, etc. They can operate ecotourism activities and guided tours to the areas and can be included in various ground-truthing and data collection activities.

As the local communities would initially be very vulnerable, the sector would need to be monitored and regulated. Government policies and guidelines need to ensure that:

1. There exists viable economic opportunities and increased contributions of communities in each of the ecotourism sites,
2. Majority income is retained in the local areas, through local employment, local procurement and community development commitments,
3. There are proper systems for regulation and accreditation of services provided so that best practices are adopted and environmental damage is minimized,
4. There exists initiatives to improve visitors' awareness and sensitivity to environmental issues,
5. Ecotourism is small scale, slow growth and has local control,
6. Natural resource management concerns are addressed by all stakeholders, and
7. The local culture is not excessively exploited.

### **3.3 Networking and collaboration with other line Departments / Institutions**

Various institutions and departments can be engaged to various thrust areas of Ecotourism.

The Ministry of Tourism has the specific agenda to promote tourism in the country in a responsible and sustainable manner and as per this mandate promotion of ecotourism assumes larger importance. The general principles of ecotourism guiding the initiatives of the Ministry are as under:

- (a) The local community should be involved leading to the overall economic development of the area,*
- (b) The likely conflicts between resource use for ecotourism and the livelihood of local inhabitants should be identified and attempts made to minimize the same,*
- (c) The type and scale of ecotourism development should be compatible with the environment and socio-cultural characteristics of the local community, and*

*(d) It should be planned as a part of the overall area development strategy, guided by an integrated land-use plan avoiding inter-sectoral conflicts and ensuring sectoral integration, associated with commensurate expansion of public services.*

*(Source – Official Website of Tourism Ministry)*

Institutions like Zoological Survey of India, Botanical Survey of India, Wildlife Institute of India, etc can be engaged in research studies and ground-truthing related studies. The institutes can help in conservation education and awareness and training of personnel for ecotourism sector.

Association with various departments like Ministry of Education, Cultural Affairs, Tribal Welfare, etc, have to be institutionalised for collaborative working. Convergence of various schemes for training, labour work, awareness, livelihood generation, research, etc has to be ensured for proper channelization of funds. Till a fully functional independent wing is developed works can be done through outsourcing to departments and other functional units of government.

The Ministry of Tourism has to play an important role in Ecotourism Development. Ecotourism networks and circuits have to be developed for creating destinations providing comprehensive set of activities for the ecotourists.

### **3.4 Innovations**

Ecotourism being a relatively newly emerging field, innovations in terms of approach, infrastructure and activities should be focussed upon.

Approach to ecotourism can be business oriented involving communities as entrepreneurs. NGOs' role can be supplementary and complementary. Financing for ecotourism programs can be moved to small and medium enterprises (SMEs), and SMEs should be given the tools to finance the development and marketing of community based partner enterprises. The corporate partnership model through CSR is also an innovative approach involving corporate funds and expertise in the sector. Ecotourism cooperatives / federations can be a model as well, involving representation from all the stakeholders.

In terms of infrastructure, use of eco-friendly building materials which are temporary in nature and use of vernacular architecture should be the priority. This will also give an exclusive experience to the visitors. The new

construction technologies like eco-friendly prefabricated structure combined with innovative designs should be used to provide unique experience to the visitors. Green building is also an emerging concept and thus the practices of green building industry can be adapted in ecotourism sector to make it less impacting and more eco-friendly.

Innovative activities in Ecotourism like Farm based ecotourism, Plantation ecotourism, Nursery Ecotourism, NTFP ecotourism, Wilderness camps (in Forest Department's facilities), Jungle Camping in Tents, Highway Forest Retreat, Eco-Parks, Caving, Rural Ecotourism, Bamboo raft cruise, Water based unique activities, etc can be promoted as new attractions.

Infrastructure and activities chosen should be in tandem with the landscape and locally available resources.

### **3.5 Thrust Areas**

The Thrust areas identified for **sustainable development of Ecotourism** Scheme for 12th Five Year Plan are as follows:

1. Innovative ecotourism projects (home stays, eco-friendly resorts (eco-lodges), tented camps) outside high density tourism zones, with preference to those owned and managed by local communities.
2. Continuous Capacity building and entrepreneurship of local stakeholders in all spheres of ecotourism management to enable them to play a larger role in the sector.
3. Develop modules for mainstream hospitality, travel and tourism, ecotourism management courses so that all ecotourism activities can promote ecologically friendly behaviour.
4. Develop systems of research, monitoring, regulation and accreditation.
5. Develop ecotourism standards that discuss repatriation of income to local communities, levels of energy consumption, source of energy consumption, waste disposal methods and education of visitors.
6. Ensure compliance of ecotourism standards for all tourism within 5 kms. of protected areas, biosphere reserves, critical tribal habitats, and forest areas. This would give a fair playing ground for firms willing to comply, as all competitors eliminate undesirable services,

7. Build a system of incentives and concessions for expensive best practices, such as local procurement, waste disposal and alternate energy,

8. Build a system of penalty for practices that eliminates local communities or promotes leakages of income from local areas.

9. Strengthen IT infrastructure, networking and Data management through ICT tools and mechanisms for systematic and effective implementation and monitoring.

**A new scheme to operationalise the emerging concept of ecotourism for livelihoods of local communities is being proposed in the 12<sup>th</sup> FYP.**

Financial Outlay for the ecotourism scheme is proposed as follows:

No	Activity	Amount (Rs in crores)
1	Institutional Development	50
2	Market Research	10
3	Infrastructure Development at Ecotourism Destinations	100
4	Promotion of Indigenous Ecological Architecture	25
5	Promotion of Ecotourism in ex situ Conservation Areas	25
6	Community Based Ecotourism Projects	300
7	Strengthening IT	50
8	Promotion of Community Entrepreneurship	75
	<b>TOTAL</b>	<b>635</b>

## 4.0 Animal Welfare

The subject of "Animal Welfare", though allocated to the Ministry of Environment and Forests (MoEF), is a complex issue requiring synergy between different Ministries / departments, mainly the Dept. of Animal Husbandry, Dairying and Fisheries (DAHD&F), Ministry of Health, Ministry of Urban Development, Ministry of Rural Development, along with the MoEF.

The main functions of Animal Welfare are performed by the MoEF through the Animal Welfare Board of India (AWBI), which is a body corporate constituted under section 4 of the Prevention of Cruelty to Animals Act (1960). The AWBI gets its funding under the Plan funds of Central Sector Scheme of Animal welfare, under the scheme 'Assistance to Animal Welfare Board of India. The following five schemes are handled by the AWBI

1. Plan / Regular Grant, to be provided by the AWBI to over 2900 AWOs
2. Provision of Shelter Houses
3. Animal Birth Control and Immunization of Stray Dogs
4. Provision of Ambulance Services for animals in Distress
5. Scheme for Relief to Animals during Natural Calamities and Unforeseen circumstances

In addition, the Government has constituted the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), and the National Institute of Animal Welfare (NIWA) under different schemes of similar nomenclature.

### 4.1 Challenges:

#### 4.1.1 Human-dog conflict

The main vector of rabies all over the world and in India too is the dog. More than 98 % deaths take place consequent to bites of rabid dogs mostly in rural areas, where awareness and facilities for post exposure anti rabies treatment are inadequate. It has also been repeatedly stressed that **once the threshold figure of 70% of a dog population being vaccinated is reached, the propagation of rabies virus is virtually halted.** WHO has also repeatedly recommended controlling the population of dogs through intensive ABC/AR programmes.

**The WHO has quoted a figure of 20565 human deaths from India due to rabies per year.** What is significant, and alarming, is that the dog - man ratio in India is rising from 1 : 40, to 1 : 20, as per the Bombay Veterinary College. This would mean that the number of stray dogs is increasing 20 million to over 30 million. If this is allowed to happen, the conflict will exacerbate.

**The no. of dog bites is estimated at 17.4 Million every year. The cost of Post Exposure Treatment in humans is about Rs. 400.00 crore and in animals it is about Rs. 10.00 crore.** (Figures taken from 'Burden of Rabies in India' by APCRI/WHO; as quoted by Kharb, R.M. in 'A Vision For a Rabies Free India'). Rabies, therefore, casts a heavy burden on India both in terms of loss of human / animal life as well as financial losses. Therefore, there is an urgent need to expand the scope of the programme manifold.

#### **4.1.2 Human-Monkey conflict**

Monkeys are not only the carriers of rabies, but their nuisance value is much more than stray dogs, as they tease the humans in more than one way. The two kinds of monkeys, rhesus macaques (*Macaca mulatta*) and Hanuman langurs (*Semnopithecus entellus*) share food and space with humans in the rural and urban areas and are often reported to be in conflict with the humans.

Problems due to monkeys are very acute in several states including Himachal Pradesh and Delhi. The monkeys have been reported snatching and stealing food articles, mutilating and tearing clothes, damaging human property and household articles, and harassing people on the roads. Most importantly, they have been reported to cause extensive damage to crops, and this is perhaps the single largest source of conflict in cities such as Shimla.

#### **4.1.3 Slaughtering**

Abuses of animals at auctions and slaughter plants occur often. Commonly observed abuses include the dragging of crippled animals, hitting, and excessive prodding of animals. In both auctions and slaughter plants, employees are under pressure to maintain a steady flow of animals to the auction ring or slaughter lines. In both types of facilities large numbers of animals must be moved rapidly.

There are over 5500 registered/licensed slaughter houses in the country as per figures submitted by the Dept. of Animal Husbandry, Ministry of Agriculture, in 2006. This figure may have grown in the last 5 years. In order to comply with the requirements under the Prevention of Cruelty (Slaughter House) Rules, and the directions issued by the Hon'ble Apex Court, the Board is required to undertake inspections of slaughter houses frequently. In order to ensure this, the Board will require adequate resources, and will have to engage qualified manpower.

## **4.2 Priorities for meeting the challenges**

The group recommends that the schemes being undertaken during the 11th Plan be continued to the 12th Plan as well. There is, in general, a move in the Government to reduce the number of Plan schemes, and include most schemes with a Ministry / Department under limited number of umbrella schemes. This way, all the schemes on animal welfare can be clubbed together as different components of a single "Animal Welfare" scheme. What the group feels important is to have more institutionalised mechanism and convergence between different organs of Government in bringing synergy of efforts towards ensuring animal welfare. The following thrust areas, as identified by the group, need more attention and financial resources.

- a. Sterilisation of stray dogs upto minimum 70% of the stray dog population
- b. Sterilisation of specific species of monkeys in selected areas upto minimum 70% of the population of such monkeys in such areas
- c. Adopting a participatory approach to resolving man-animal conflict
- d. Convergence of schemes of related Ministries / departments for contributing to the cause of animal welfare
- e. Capacity building of key players, viz., NGOs, AWOs, civic bodies, veterinarians
- f. Better management of slaughterhouses
- g. Better management of *gaushalas*

## **4.3 Recommendations to meet the challenges**

### **4.3.1 Community centred strategy**

The groups recommends that the AWBI continues its activities by ensuring greater reach among the people by undertaking sustained

programmes to create public awareness and sensitise citizens and Resident Welfare Associations (RWAs) about the benefits of rabies control and the dog sterilization programme. Public awareness campaigning should aim at preparing the public for their active co-operation in the programme, through the press, and the media highlighting the advantages of mass anti rabies vaccination of dogs and effective Birth Control of stray/community dogs, pet/pedigreed dogs so as to control rabies and ultimately to eradicate this horrible disease from India.

#### **4.3.2 Convergence of schemes of different ministries**

Necessary financial resources for eradication of rabies can be pooled from the following Ministries / Departments:

- (i) Ministry of Environment and Forests
- (ii) Dept. of Animal Husbandry, Dairying and Fisheries
- (iii) Ministry of Health
- (iv) Ministry of Urban Development
- (v) Ministry of Rural Development

#### **4.3.3 Capacity building**

At present the NGOs / AWOs / SPCAs / Civic bodies involved in carrying out ABC/AR Programme are facing problems in efficient conduct of the programme due to lack of availability of trained Veterinarians and Para Vets in surgical protocols for sterilization of stray dogs. There is limited availability of well trained dog catchers with the civic bodies. This is one of the main causes of limiting the scope of ABC/AR Programme in India. This needs to be strengthened.

#### **4.3.4 Harnessing Support by Voluntary Participation in Animal Welfare**

Limited resources continue to be challenge for this sector. It is proposed to set up an **institutional mechanism/scheme** to attract and gainfully utilise resources from entities including corporate bodies and philanthropists, amongst others.

A part of the requirement of funds for animal welfare can be managed by involving willing corporates in the Animal Welfare programmes. Contributions received from the corporate houses can be pooled and eventually utilised with the advice of the Board. The donating corporates may be provided the option of indicating their preference of activities or specific locations, like the case of DLF corporate house working within the DLF area in Gurgaon.

#### **4.3.5 Animal Welfare Board of India**

The AWBI is the main body assisting the MoEF at the National level in most of the important areas in Animal Welfare. Besides being the only national level body engaged in efforts at controlling the incidences of rabies, and population of stray dogs, the Board keeps occupied with the task of releasing grants under the four schemes run by it. At present, there are more than 2900 NGOs / Gaushalas, SPCAs who depend on AWBI for conducting animal welfare related programmes all over India. The Board needs adequate funds at its disposal for fulfilling its mandate.

#### **4.3.6 State Boards, District SPCAs**

Though some of the States have constituted Animal Welfare Boards at the State level, there is a need to have such Board in all the States. Moreover, as per a Supreme Court direction, and as per the Prevention of Cruelty (Establishment of Societies for the Prevention of Cruelty to Animals) Rules, SPCAs have to be established in all districts within all States.

#### **4.3.7 Animal Birth Control and Immunisation**

The group recommends that the scheme 'Animal Birth Control and Immunization of Stray Dogs' be renamed as "Animal Birth Control and Immunization", so that it is not treated to deal only with stray dogs.

In the case of monkeys, the Rhesus Birth Control Programme initiated by the Wildlife Wing of the Forest Department of Himachal Pradesh needs to be expanded to set up a National Training Centre for sterilization of monkeys, and for training of Vets / Para-vets of all states.

The Board recommends that in order to ensure complete elimination of rabies from the country, the Ministry should formulate a "**National Rabies Control Mission**".

#### **4.3.8 Slaughter house inspections**

Inspection of slaughter houses has to be ensured, as mandated by the Hon'ble Supreme Court of India, and as required by the Prevention of Cruelty (Slaughter House) Rules. This is absolutely imperative in order to ensure humane, hygienic slaughter, and meet world standards. Although this duty has been entrusted to the AWBI, the Board will not be able to handle the workload unless supported by adequate manpower.

The group recommends that retired veterinary practitioners and other volunteers should be engaged on a reasonable incentive for this purpose.

#### **4.3.9 Shelterhouses / Gaushalas**

The Ministry, with the help of the Board, should prepare an action plan with the objective to establish shelter houses in each District of the country by providing priority to non-covered and partially covered regions. As funding will always remain a constraint, looking at the number of shelterhouses to be established and maintained, the proposed component of "Voluntary Participation in Animal Welfare", mainly receiving contributions from the corporate houses under the Corporate Social Responsibility may be used for this purpose.

#### **4.3.10 National Institute of Animal Welfare**

The Institute should undertake research project on the subjects related to Animal Birth Control, Clinical surgery, Medicine, etc., related to Animal Welfare. The Institute should also strive for affiliation with other Universities / Institutions; both National and International, to conduct various courses related to animal welfare. The institute is also expected to produce useful material for extensive information, education, and, communication (IEC) activities to promote the concept of Animal Welfare.

#### **4.3.11 CPCSEA**

The CPCSEA has a specific mandate of supervising experiments on animals. The group recommends that the committee should also contribute in developing linkages with other stakeholders i.e. Government Department / Research Organization to make larger acceptability on welfare measures of animals. The committee can also play an important role in advising the NIAW in developing IEC material and undertaking activities to promote the concept of Animal Welfare in experimental / laboratory animals.

**Projected Allocation of Animal Welfare Schemes for 12<sup>th</sup> 5 Year Plan  
(₹ in Crore)**

<b>AWBI</b>	<b>83.15</b>
<b>Shelter House</b>	<b>70.21</b>
<b>ABC</b>	<b>100.00</b>
<b>Ambulance Services</b>	<b>24.73</b>
<b>Natural Calamity Relief</b>	<b>3.60</b>
<b>Assistance to CPCSEA</b>	<b>3.05</b>
<b>NIAW</b>	<b>15.26</b>
<b>TOTAL</b>	<b>300</b>