

Chapter - 06

VISIONS, GOALS, OBJECTIVES AND PROBLEMS

Vision

Apart from the National Park and Sanctuary in PTR Seoni, the Protected Area of adjoining Maharashtra and Rukhad – Sakata area of South Seoni Division forms unique habitat for Tiger and its co-predators and Prey base. This entire area including forest and other area of adjoining Territorial divisions forms a Greater Pench Conservation Unit. The Total forest area of this is 1435.630 sq Km (Pench Tiger Reserve, Seoni M.P. – 411.330 sq. Km, PTR Maharashtra – 256 sq Km and Buffer area of South Seoni, East Chhindwara & South Chhindwara Forest Divisions – 768.30 sq. Km).

The tiger is the largest obligate terrestrial carnivore in all of the mammalian assemblages in which it occurs in Asia. By virtue of being the top predator, the tiger functions as an umbrella species for the conservation of biodiversity, ecosystem functions, goods, and services in forest systems. Tiger is a keystone species in its environment. By saving flagship species, the tiger, we save complex ecosystem, its services & habitats including all native flora and fauna that would otherwise be destroyed in the relentless march of human need and all too often greed. Saving the tiger symbolises the conservation of the biodiversity and ecological restoration.

The vision is to manage the critical tiger habitat of the Pench tiger reserve to maintain the source population of the most important and the critical species of the Central Indian Landscape "Tiger" to ensure the sustainability of Tiger in the landscape and maintain its ecological and biological diversity. Pench management envision ecological restoration of this Greater Pench Conservation Unit with conservation of Biodiversity and restoration of all life supporting system in this landscape.

Management Goals

To maintain a viable population of Tiger it's Prey base in Pench Landscape and preservation of bio-diversity of PA & Conservation and sustainable use of Biodiversity in surrounding area with maintaining a harmonious relation with indigenous people without causing any stress on the PA resources.

Management Objectives

The Management objectives of Pench Tiger Reserve are as followings: -

- (i) Protection of Pench Tiger Reserve and providing site-specific habitat inputs for a viable population of tigers, co-predators and prey animals without distorting the natural prey-predator ecological cycle in the habitat.

- (ii) Ecologically compatible land use in the buffer area of Pench & linking Pench to Kanha with livelihood concerns of local people, so as to provide dispersal habitats & corridor for spillover population of wild animals.
- (iii) To ensure the forestry operation of regular forest divisions are not incompatible with the need of tiger conservation.
- (iv) To conserve the ecological integrity and interspersions of various habitats and their associated fauna so as to maintain the genetic diversity in perpetuity.
- (v) To reduce the man- animal conflict.
- (vi) To create sufficient awareness to conserve the Nature, Natural Resources and Natural heritage on sustainable basis.

Problems in Achieving Objectives –

Above objectives are examined against anticipated issues/problems, which may hinder partially or fully achieving objectives, these issues and problems anticipated are given as under: -

Biotic pressure :-

There are 99 villages within the Zone of Influence, which have sizable population, which depends upon natural resource for their day to day need like fuel wood agriculture equipment, food security, minor forest produce etc on the buffer zone and PA. The increasing population is putting more and more pressure on resources, causing degradation of forest and habitat.

Grazing :-

Cattle population in the zone of influence surrounding the PA is very high, which pose a serious problem of grazing, resulting in invasion of weeds and destruction of habitat.

Limited grasslands :-

Though plenty grass is available in the open forest and grass land but the grasslands are only 2.5% of PA and they are being invaded by woody growth and invasive weeds like Lantana, Parthenium, Cassia tora, Hyptis suaveolens etc.

Invasion of draw down area by Parthanium:-

The vast draw down area of Totaladoh reservoir gets invaded by invasive weed Parthenium hysteriophorus, which reduces the palatable grass productivity of the area.

Insufficient and overaged staff :-

There is an acute shortage of frontline and other trained staff to carryout day-to-day patrolling, habitat management, Monitoring, Research, Eco-Tourism and Eco-Deployment works. The available staffs are getting aged and not properly trained for all the activities. The service conditions in Protected Area is very hard, the staff and

watchers have to stay in camps, away from their family and maintain double establishment for their family.

Weed infestation :-

Approximately 5300 hac. of woodland is infested by lantana, which is under control due to past treatment but still a sizable area is under infestation and it is spreading every year. Approximately 6000-hac area of woodland is under weed infestation. These areas are mainly near the human habitation and were under heavy grazing in the past.

NTFP Collection :-

Although there is ban on removal of forest produce from PAs, but still occasional illegal collection of NTFP like *Mahua*, *Achar*, *Honey*, *Mahul Patta*, *Fuelwood*, & *Medicinal plants* is carried out. The major threat is due to over and destructive collection in Buffer area, which is degrading the habitat. Removal of fuelwood in Buffer area often involves lopping/cutting down of trees. The collection of mahua and honey often leads to forest fires.

Fishing: -

The Totaladoh reservoir was burdened with fishing rights granted by government, which were settled after instruction of Hon Supreme Court. Now there are no fishing rights in the reservoir but still some illegal fishing in small scale often happen.

Pilgrim fairs :-

There are no major pilgrim shrines within the PA, but some fairs are conducted in and at the periphery of PA. Most of the fairs are only once in a year on special occasion like Kumba baba mela, Chotakum baba mela, Nagdev mela etc.. These fairs create some disturbances like Noise, fuelwood collection, fires, leaving a large garbage etc.

Dwindling Buffer areas :-

This reserve do not have any notified buffer areas, but the forests of South Seoni, East and South Chhindwara Forest Divisions are identified as buffer as buffer areas. There is heavy pressure on these forest and are degrading very fast.

Tourist inflows :-

The tourist pressure is increasing every year. This inflow some days of the year has crossed carrying capacity. Tour operator & Lodged owners resist any attempt to regulate and minimize the adverse impact of tourism.

Anti Conservation Activists :-

Few organizations are involved in provoking people against conservation and reserve management. Their modus oprendi is to oppose government activities, so as to muster support of people to build their political base.

Insufficient infrastructure –

Though a lot of infrastructure development works have been carried out in the past but to overcome the new threats and challenges, better infrastructure support like construction and maintenance of roads, Construction and maintenance of Patrolling camps, Vehicles, Boats, field Gears, Wireless system, Night Vision, Watch towers, Office Buildings, Staff Quarters, Research and Monitoring Equipments, Infrastructure for Environmental Education, Eco – Tourism & Interpretation, Infrastructure for Wild life Health Monitoring, Research & Rescue operations.

Strengths-Weaknesses-Opportunities-Limitations (SWOT) Analyses

I. Strength of Pench Tiger Reserve:

1. No human settlement or villages inside the protected area:

It is a blessing for Pench Tiger Reserve that there is no village left inside the National Park and the Pench Sanctuary. All of the villages have already been relocated outside, way back in 1994. Hence, no undesirable biotic interference is experienced in the Sanctum sanctorum area except some pressure on the fringes.

2. Availability of water in Pench River & Totladoh Reservoir

Pench River, which bisects the National Park into two equal halves, remains alive nearly for six months. Although the flow of river ceases after the month of January, water is still available in various large pools, locally known as "dohs" in few places.

The Pench has been dammed near Totladoh, which has resulted in the inundation of roughly seventy-two sq. km of forest area under submergence. The river, "dohs" and the large reservoir of Totladoh form the main source of water during pinch period also.

3. Rich and varied habitats supporting spectrum of wilderness juxtaposition of lovely woodland and excellent meadows.

4. Encircled by a thick belt of forest growth as useful buffer providing ecological contiguity all around the PA except on the western portion.

5. Continuity of PA with another PA across the state boundary of Maharashtra

Pench Tiger Reserve of Maharashtra has a common boundary with this P.A. Such continuity of undisturbed area provides lot of protection on that side. Similarly the ecological contiguity between the two reserves facilitates the genetic exchange, which always go in favour of the long-term survival of the wild life occurring in this PA.

6. Easy access to the PA. from headquarters

Except during rains, every part of the Protected Area can be approached at a short notice, from Seoni, the H.Q. of the Field Director. It helps in efficient management in case of emergency also.

7. A vast road network in the PA helps in faster communication of staff for supervision of works in case of emergency.

8. Finally notified Park and Sanctuary.

All the rights related to permission granted to 305 fishermen to fish in Totaladoh reservoir have been acquired and extinguished, so all the rights in the Protected Area have been settled and both the Protected Area (Indrapriya darshini Pench National Park and Pench Mowgli Sanctuary) have been finally notified.

II. Weaknesses of Pench Tiger Reserve:

1) Small Size of PA –

As per the guideline for preparation of tiger Conservation plan (NTCA), for a viable population of tiger an inviolate space of 800-1000 sq. km. and a buffer of 1000-2000 sq. km. is required. Where as the size of Core of Pench is only 411.30 sq km.

2) Immediate boundary to certain villages -

In some pockets, the PA boundary touches the fields of certain villages. These are the sore spots, where grazing pressure of cattle is on one side and crop raiding by wild animals is on other side. This creates lot of man - animal conflicts. Sometimes, the wild animals passing through such villages get electrocuted.

3) Lack of adequate staff for fieldwork (Young and knowledgeable) –

In order to carry out Protection, Habitat Development, Eco-tourism and Eco-development works, there is an acute shortage of young and knowledge staff. Additional young and trained staffs are required.

4) Shortage of Water during summer season –

Typical topography and Soil type does not allow the storage of water at major site. Most of the rain- water is drained to the Pench river resulting in the congregation of wild animals along the bank of Pench river especially during summer period.

5) Occurrence of Weed –

Core area of Pench is heavily infested with invasive weeds like Parthenium hysterophorus, Hyptis suaveolens, Cassia tora, Sida species, Lantana camara etc., which is causing threat to habitat by inhibiting and encroaching indigenous species and causing many adverse impact on biodiversity.

6) Annual deposition of debris brought with flood during the rainy season

During rainy season Pench river get flooded and brings a lot of debris from its catchments area, which is mostly densely populated human habitation and agricultural fields. These non-biodegradable materials cause serious threat to the wild life of Pench.

7) Loss of most valuable structure like dooh and big taluses like structure and riparian area.

The initial setting along Pench river was a beautiful riparian area having lush green tree growth, deep gorges, dooh and taluses like structure, which was an ideal setting for big cats like tiger during summer season. After the construction of Totladoh reservoir most of this setting has come under submergence. Even in the area beyond submergence in upper reaches, a lot of sand and debris getting deposited and the dooh and kassas are getting filled up. This causes loss of valuable most favorite summer habitat of tiger.

8) Mushrooming of hotels and resorts near Turiya Gate –

There is a very fast mushrooming of hotels & resorts in the area near Turiya gate. This new type of land use pattern affects heavily on natural resource. The area becoming unsuitable for wild life movement due to excessive construction, lighting, pollution, littering and physical barriers like boundary wall.

III. Opportunities.

1. Lesson learnt during India Eco-development Program -

Pench Tiger Reserve has implanted Eco-development Project from 1997-1998 to 2004-05, under India Eco-development Program, Which was mainly focus on Eco-development of the villages surrounding the Protected Area. This has created harmonious relations of PA and its surrounding villages by creating a better understanding of PA with local people & understanding the problems of local people to PA managers.

2. Proximity to three other Tiger Reserves

Pench Tiger Reserve is surrounded by three other Tiger Reserves, the Kanha, Satpura and Pench (Maharashtra). The Pench Tiger Reserve, Maharashtra is having common boundary, whereas Kanha and Satpura are situated between 150-200 Kms. distance. This gives an opportunity to learn, discuss and interact with these reserves easily.

3. Nearness to Nagpur and NH – 7

The township of Nagpur is located only 92 Kms. from this reserve, only a two-hour drive. It also falls on the route to Kanha National Park from Nagpur. There are excellent opportunities to develop Ecotourism in this Tiger rich area, especially for the tourists coming from Nagpur. The excessive tourist pressure on the Kanha Tiger reserve can be reduced considerably.

IV. THREATS.

1. Illicit fishing in far spread reservoir of Totladoh dam :-

There were a large population of Fishermen fishing in the vast area (54 Sq. Km.) of Totaladoh reservoir for quite long time and selling their catch to as far distances as Nagpur and Jabalpur. Now it has been prohibited, but all those people involved in illicit fishing try to sneak in from any corner. These fishermen always pose threat to the Park Management. Ancillary activities like; setting of fire, poaching of animals may cause a lot of damage to habitat. Though the problem in our side is under control but the weakness in protection from Maharastra area by concerning management causes a serious threat.

2. Near ness to Katni, which is the center of Paradhees, the most notorious large carnivore poachers.

3. Invasion of Annual weed over the large area in draw down area of Totladoh reservoir -

During the construction of reservoir the large area coming under submergence was clear felled, which created a favorable condition to the invasive weeds like Parthenium hystoriophorus, Cassia tora, Sida and others. These weeds, especially the Parthenium causes a lot of environmental and health hazards to habitat and its inhabitants.

4. Large population of human being and cattle in the buffer zone.

A population of about 60,000 people and 60,000 cattle live in the buffer zone of the PA. The productivity of the grasslands and the forest around is depleting fast. This is posing a great threat to the PA. Hence, Eco-development works are to be taken on priority basis in order to develop their resources, so as to reduce their dependence on PA.

5. Electrification of villages and passage of power lines.

Almost all of the villages around the PA are electrified and a number of power lines are passing in the periphery of it. Some people try to electrocute the wild animals for meat and profit.

6. Local and temporary migration of wild animals from the water scarce area.

Although the central and southeast portion of the PA has ample water, the area on North and Northwest; especially in sanctuary has got very little water during summers. It compels the animals to migrate temporarily to the adjoining forests and villages, out side the PA, where they face a threat of poaching. Hence, availability of water in such areas has to be enhanced.

7. The National Highway No.7 passing on the fringes of PA.

This National Highway No. – 7 passes on the eastern boundary of Pench Mowgali Sanctuary. A number of fast moving vehicles keep on plying on this highway, day and night. Wild animals do keep on crossing this highway, especially during nights. Sometimes they get hit by fast moving vehicles and get killed also. As a policy, all the "speed breakers" on this road have been removed. There is a great threat to animals including Tiger of getting hit by these vehicles; we have already lost a few in the past. Now the widening of this Highway is a great thereat to this conservation unit, Strict Ecological and Environmental Safe guard measures must be taken to protect this Greater Pench Eco – System.

8. Traditional passages through the PA.

There are certain traditional passages of local population, which pass through the core of the PA. Although alternative roads have already been constructed by PA authority but still some time the local People try to use the roads inside the PA.

9. Traditional practice of poaching by the local community by poisoning the water holes, intentional chases of wild animals by trained pet dogs and other hunting techniques.

10. Close proximity with Nagpur-Balaghat - the recognized Hot spots of trade of wild animal body parts and their derivatives.

11. Invasion by obnoxious weeds like Lantana, Parthanium, Vantulsi and Chirota.

12. Invasion of grassland by woody encroachment.

13. Invasion by woody and annual weeds.
