

**Full Length Research Paper**

A Critical Study of Wild Life Status in Madhya Pradesh & Conservation under changing Environment

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The population of wild life continues to dwindle in almost all states. Madhya Pradesh, which was once famous for its forest and wild life, is no exception, This loss of natural heritage in large scale has become a concern for all, as wild life not only balance the ecosystem but also serves for the economic development of the country. The present paper attempts to assess the status of wild animals of the state and the efforts made by the Government for their protection and conservation. The present paper also aims to find strategy for conservation under changing environment.

Key Words: Conservation, Habitat, Vertebrate, Legislation, Poaching**Introduction**

All life forms on Earth are closely interlinked with each other. In fact, the Ecosystem around the human being is delicately balanced by apparently looking useless animals and plants. The disturbance in one gives rise to imbalance in others ultimately affecting the very existence of the human being. Wild Life, a major component of the biota, not only balances the ecosystem but also serves as the source of food, medicine and other vital needs for the man. Although this has been greatly realized Form time to time, man is yet busy in destroying the natural forest and wild life. The rate of destruction has now reached to such an extent that about 25,000 plant species and more than a thousands vertebrate species are threatened with extinction, This alarming rate of loss of species warrants to formulate and implement a positive management strategy for their protection and conservation under changing environment. This paper gives an account of wild life status of Madhya Pradesh and the efforts made by environment & other organization for their protection and conservation under changing environment.

Location of Madhya Pradesh

Madhya Pradesh has coordinates 22.42⁰N 72.54⁰E. Madhya Pradesh was established on 1 Nov.1956 The largest City is Indore. The Districts of Madhya Pradesh are 50 in number The Area of M.P. is 308, 252 km² (119,017 sq mi). The National Animal of M.P. is Barasingha (Swamp Deer). Madhya Pradesh is nicknamed 'Heart of India' due to its geographical location in India. It is the second largest state in the country by area, with over 75 million inhabitants. It is 6th largest state in India. It borders states of Uttar Pradesh, Chhattisgarh, Maharashtra, Gujarat and Rajasthan.

Wild life Status in Madhya Pradesh

Madhya Pradesh is the second largest state of India and the home state of famous white tiger, falls under the subragion, the peninsular India, It possesses both tropical moist and tropical dry deciduous forest with shrub and thorny vegetations. Because of the large forest area (1,66,160 sq. km.) the state is endowad with variety of wild fauna, Population structure of wild life of the state is also quite encouraging, Based on 2006 census report, it is estimated that more than 300 tiger, 593 panther, 42535 chital, 13327 sambar, 15426 nilgai 3380 chausingha, 9928 Chinkara, 4820 black buck, 817 barasingha, 8837 gaur, 4849 barking deer and 153 great inidan bustard are present in different national 4849 parks and sanctuaries of Madhya Pradesh. The study hased on available census report also reveals an increasing trend in population structure of most of the animals, except tigers and barking year.

Present Status of Tiger Population in Madhya Pradesh (MP)

MP has 9 National Parks & 25 wild life sanctuaries spread over a total of 10, 862 sq. km. constituting 3.52% of state total area. The central government launched 'Project Tiger' in 1973.

At Present, MP has 6 Project Tiger Areas. MP contains 19% of India's total tigers & 10% of world's tiger numbers. According to 2006 Census, there were around 300 tigers & 3,000 Leopards in MP. There is fall in poaching of wild life animals in MP but small animals are an easy target. In Tiger Estimation 290 results by MOEF (Madhya Pradesh) has reported presence of total 257 tigers with upper limit of 301 & lower limit of 213. MP with 300 tigers had maintained a slender margin over Karnataka in last census in 2006, as latter had reported 290 tigers. The total area occupied by the tigers has shrunk significantly in MP In the last wild life count in 2006, Tigers had occupied 15,614 sq. km. while the same as dwindled to 12,709 sq. km. MP has shown reversible trend in terms of tiger population. The overall population has reached to 1,706 against figure of 1,411 where as MP has registered a decline in this regard. Panna & Kanha tiger reserves have reportedly shown decline in tigers in MP. The tiger population has dropped to 257 in latest tiger Census from 300 tigers in 2006 in MP Kanha in MP is one of best managed reserves in the country .

Conservation Efforts under Changing Environment

Madhya Pradesh has made considerable progress in the protection and conservation of its wild life. Significant measures that have been followed by the government since last few years are listed below:-

(i) Prevention of Poaching and Killing:

State took a notable step for wild life conservation by imposing a total ban on hunting in 1971 even prior to the control legislation called Wild Life (protection) Act, 1972. Apart from implementing the control acts (includes Environment Protection Act, 1986) Govt. also reviews and strengthens the state laws from time to time. Other steps considered for effective control of poaching include, strict vigilance by forest staff, setting-up of check posts for prevention of illegal trades, confidential cash award for apprehension of offenders and suitable compensation to the owner of animals killed by tiger or leopard. However, for complete prevention of poaching and killing not only sufficient number of trained, dedicated forest staff is necessary, but public vigilance and timely co-operation is also must.

(ii) Habitat Protection:

All living organisms including wild animals require proper space, clean air and proper breeding ground for survival and propagation of their species. Existence of sufficient forest area is therefore necessary for the survival and reproduction of wild animals. However, in the name of urbanization and economic development large forest area is gradually denuded and it is now well understood that habitat destruction is the most serious threat for wild life existence. From this aspect of wild life management, M.P. is far ahead than all other states. One of the most significant steps is creation of National Parks and Sanctuaries. At present there are 11 National Parks and 33 wild life sanctuaries. Table presents development of N.P. and wild life sanctuaries of the state. Project Tiger is also being run in Kanha and Indravati national parks of the state. Recently under the UNESCO (MAB) programme, Kanha has been declared as a biosphere reserve of the country.

(iii) Legislative Measures:

Other measures taken by the Govt. for habitat protection and improvement in cludes creation of separate Wild Life Wing in 1977.and State Wild Life Advisory Board in 1978 regulation in the trade of forest resources, prevention of human encroachment of forest area, provision of Environmental Impact Assessment (EIA) before undertaking any major developmental project, prevention of forest fire, regulation of biotic interference, rehabilitation of forest dwellers and massive afforestation, social forestry and waste land development programme. Apart from these two significant steps, i.e., prevention of animal poaching and habitat protection, other efforts, which are gaining momentum in the states are the promotion of wild life research and education, creation of environmental awareness through mass media, zoo improvement progamme, proper coordination between allied departments and investment of more funds

Table 1. Development of National Parks and Sanctuaries in Madhya Pradesh

S.No.	Year	National Parks	Sanctuaries
1	1979	3	19
2	1980	3	19
3	1981	6	24
4	1982	9	24
5	1983	11	31
6	1984	11	31
7	1985	11	31
8	1986	11	31
9	1987	11	31

10	1988	11	31
11	1989	11	31
12	1990	11	33

Table 2. National Parks in Madhya Pradesh

S.No.	Name	Area (sq. km.)
1	Kanha	939.94
2	Madhav	337.00
3	Sanjay	1938.01
4	Indrawati	1258.37
5	Van Vihar	4.45
6	Panna	542.66
7	Satpura	524.37
8	Kanger	200.00
9	Fossil	0.27
10	Pench	293.00
11	Sariska	448.00

Table 3. Wild Life Sanctuaries in Madhya Pradesh

S.No.	Name	Area (sq. km)
1	Kheoni	122.70
2	Narsingharh	57.19
3	Gandhisagar	368.62
4	Bori	518.00
5	Pachmarhi	461.85
6	Dubri	364.69
7	Bodalkhoh	104.35
8	Gomardah	277.82
9	Ratopani	688.79
10	Singhori	287.91
11	Barnawapara	244.66
12	Sitanodi	553.36
13	Noradehi	1034.52
14	Achanakmar	551.55
15	Pench	449.39
16	Samarsot	340.35
17	Chambal	320.00
18	Ken Gharial	45.00
19	Sone Gharial	41.80
20	Kuno Palpur	345.00
21	Karera	202.21
22	Ghategoan	512.00
23	Bagdara	478.90
24	Tamore Pingla	608.52
25	Bairamgarh	139.00
26	Fensatallite	110.74
27	Panpatha	245.84
28	Pamed Wild Buffalo	262.00
29	Sardarpur Florican	348.12
30	Soilana Florican	12.96
31	Udanti Wild Buffalo	247.59

Wild Life Management in Madhya Pradesh

Wild Life Management in Madhya Pradesh includes both Ameliorative & Compensatory management. Important aspects are:-

- 1) Improvement of habitat
- 2) Development of Communication & protection infrastructure
- 3) Anti-poaching activities

- 4) Patrolling
- 5) Research & Monitoring
- 6) Mitigation of man-animal conflict
- 7) (G)Visitor use management (tourism)
- 8) Eco-Tourism
- 9) Maintenance of Roads, Check Barriers, Patrolling Camps, Watch Towers, Wireless Network, Water Sources, Vehicles.

Conclusion

In conclusion it can be said that inspite of all these protective measures, wild life management in the state is far from satisfactory. A strategy, "development without destruction" is needed to be evolved. Let us not forget that if a species becomes extinct, it can not be recovered and is lost for ever. Every species plays an important role at its place in maintaining the balance of Eco-System. So we must try to conserve the wild life at every cost.

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References

- IUCN (1985). In: *Red Data Book (revised volume on fishes, amphibians, reptiles, birds and mammals)* IUCN, Gland
- Lucas, G. and Hugh, S. (1978). In: *IUCN Plant Red Data Book*, IUCN, Gland
- Robert, A. and Christine, P. A. (1988) In: *Threatened Vertebrates (Second draft)* Gen Assembly Paper, G. A. **78/10**, Add.6, IUCN.
- Seharia, V.B. (1990) in: *Wild Life of India*, Natraj Publication, Dehradun, India. p.31
- Singh, U.R. and Kar, A(1997) in : *Wild Life in Madhya Pradesh*, ESR, EPCO Publication , Bhopal, India.