

**All-India Survey
of
National Parks and Sanctuaries**

QUESTIONNAIRE I

**to be filled in by the Director of
each National Park/Sanctuary**

Sponsored by

**THE DEPARTMENT OF ENVIRONMENT
GOVERNMENT OF INDIA**

1984

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INTRODUCTION

With the increasing pressures on India's forests and wildlife, our National Parks and Sanctuaries are becoming progressively critical as repositories of living natural resources. Unfortunately, comprehensive data on the current status and needs of all the protected areas in the country is not available. The collection of such data on a country-wide basis would help in developing policies, programmes and budgets to support, more effectively, efforts at protecting and managing these areas.

2. With this in mind, the Central Department of Environment has sponsored an All-India Survey of National Parks and Sanctuaries, as a first step to collating and analysing all the relevant information. Briefly, the objectives of this survey are:

- (a) To collect and collate, in a uniform format, information regarding each National Park and Sanctuary in terms of its legal status; management plans and practices; geographical, biological and social parameters; research and education activities; and financial outlays.
- (b) To solicit the views and suggestions of the Chief Wildlife Wardens and of the Park/Sanctuary Directors, regarding the better management and future expansion of these protected areas.
- (c) To analyse all this information and make available, to the Chief Wildlife Wardens, the State Governments and to the National Parks and Sanctuaries, a detailed compilation of this information, covering all the Parks and Sanctuaries in the country.

3. The Department has requested Smt. D.S. Variava, former member of the National Committee for Environment Planning and member of the IUCN Education Commission, and Shri Shekhar Singh of the faculty of the Indian Institute of Public Administration, New Delhi, to undertake this work. They have, in consultation with the Department, prepared two questionnaires: Questionnaire I to be filled in by the Director of each National Park/Sanctuary and Questionnaire II to be filled in by the Chief Wildlife Warden of each State/Union Territory.

4. Both these questionnaires may kindly be filled in and mailed direct, by Registered Post, to:

Shri Shekhar Singh,
Indian Institute of Public Administration,
Indraprastha Estate,
New Delhi - 110002.

5. Apart from making a copy available to all Chief Wildlife Wardens, to the State Governments and to each of the National Parks/Sanctuaries, a copy of the final report will also be made available to each Park/Sanctuary Director, whose filled in questionnaire is received in time to be included in the report.

6. As we hope, in the near future, to build up a data bank regarding National Parks and Sanctuaries, we very much look forward to your suggestions and co-operation in this task.

Samar Singh
Joint Secretary (WL)
and
Director
Wildlife Preservation
Department of Environment
Government of India

INSTRUCTIONS FOR FILLING IN THE QUESTIONNAIRE

As responses to this questionnaire would be fed into a computer, you are requested to read and follow the instructions carefully and thereby help us to ensure that the information is correctly recorded .

1. The questionnaire may kindly be filled and despatched back WITHIN ONE MONTH of receipt. Please do not delay your response, as this would hold up the compilation for the whole country.
2. Dates/period for which data is required have been indicated in the questionnaire. Where data is not available for the dates/period required, KINDLY GIVE DATA FOR THE NEAREST AVAILABLE DATES/PERIOD AND INDICATE CLEARLY THE DATES/PERIOD FOR WHICH DATA IS BEING SUPPLIED BY YOU.
3. For the sake of brevity, the term 'Park' has been used instead of Park/Sanctuary at certain places. However, all such questions should also be answered in the case of sanctuaries.
4. Wherever the space given in the questionnaire for recording answers is found inadequate, kindly attach extra sheets of paper INDICATING THE PAGE NUMBER AND QUESTION NUMBER which is continued in these sheets.
5. All references to the Act and sections, unless otherwise specified, are to the Wildlife (Protection) Act of 1972.
6. Much of the information is asked for separately for core zone (CZ) and buffer zone (BZ). Where the Park/Sanctuary has not been demarcated into these two zones, KINDLY GIVE INFORMATION FOR THE WHOLE PARK/SANCTUARY UNDER THE CORE ZONE (CZ) COLUMN, AND CANCEL BOTH THE HEADINGS OF CORE ZONE (CZ) AND BUFFER ZONE (BZ).
7. VERY IMPORTANT: while filling in the questionnaire please:
 - (a) WRITE "N.A." against any question not applicable to your Park/Sanctuary.
 - (b) LEAVE BLANK the space against any question that you do not have the answer to. In case you expect to have this information available by some future date, please indicate this date IN THE MARGIN ON THE LEFT OF THE QUESTION NUMBER.
 - (c) WRITE "NO COMMENTS" in the space given for your own views, in case you choose not to offer any.

AS ONE OF THE FUNCTIONS OF THIS QUESTIONNAIRE IS TO DETERMINE THE QUANTUM OF INFORMATION AVAILABLE WITH THE PARK/SANCTUARY AUTHORITIES, KINDLY ENSURE THAT ONLY THOSE ANSWER SPACES ARE LEFT BLANK FOR WHICH YOU DO NOT HAVE INFORMATION.

8. While giving data that you might not be totally certain about, kindly indicate the reasons for your reservations by a footnote at the bottom of the page, clearly stating the question number to which the foot-note refers.
9. Wherever the data being provided has not been collected officially, kindly give its source in a footnote at the bottom of the page.
10. STATISTICAL DATA MAY KINDLY BE PROVIDED IN THE UNITS ASKED FOR IN THE QUESTIONNAIRE. In case the data available with you is in some other units, please convert it to the relevant units before entering it in the questionnaire. In those rare cases where such a conversion is not possible, kindly indicate the units in which the data is being given.
11. The following abbreviations have been used in the questionnaire:

Sec.	=	Section of Act	A	=	Adjacent Areas
ha.	=	hectares	P	=	Park/Sanctuary
Est.	=	estimated	CZ	=	core zone
			BZ	=	buffer Zone

adjacent = villages/areas in a 10 km radius of the
village/
Park/Sanctuary boundary.
areas
12. While answering the questions, please tick mark the correct answer in the space provided, or give information where relevant.
13. This questionnaire may kindly be filled in duplicate. One copy may be retained by you as your record copy and also to refer to if there are any further queries regarding the questionnaire. The original, along with its enclosures (see list of required enclosures on the next page) may kindly be filled and sent by registered post, to:

Shri Shekhar Singh
Indian Institute of Public Administration,
Indraprastha Estate
New Delhi - 110 002

Dilnavaz Variava
Shekhar Singh

LIST OF DOCUMENTS TO BE SENT WITH THIS QUESTIONNAIRE

1. Copy of past management plan(s) (especially for the past 5 years).
2. Copy of the sanctioned budget of the Park/Sanctuary for the last 5 years.
3. Copy each of any material published or cyclostyled or typed, on the Park.
4. Copy of any study done on the Park.
5. Copy of future plans, management plans or work proposals.
6. Copy of future budget proposals.
7. Maps of Park/Sanctuary as specified in section II of questionnaire.
8. Any other material that you might consider useful or that might provide required data or information.

Questionnaire I

Name and full address
of Park/Sanctuary

State/Union Territory

Name, designation and full
address of the Park/Sanctuary
Director

Date of receipt of
questionnaire

Date of despatch of filled
questionnaire

Signature of Park/Sanctuary
Director

FOR COMPUTER CODING
PLEASE DO NOT FILL

Date of receipt

Park/Sanctuary Code

Date of coding

Signature of coder

PART - I

LEGAL ASPECTS

Part-I of this questionnaire is primarily aimed at defining the legal position of the area. The information sought is mainly factual in nature and relates to the various sections of the Wild Life (Protection) Act 1972. SECTIONS MENTIONED IN BRACKETS REFER TO THIS ACT.

LEGAL STATUS

Please tick-mark (___) the relevant answers, where applicable, and otherwise give information required.

1. Is the area you are responding about:

1.1 A National Park _____

1.2 A Sanctuary _____

2. Which of the following steps have been taken with regard to your National Park/Sanctuary, and when:*

		Day	Month	Year	
2.1 Declared a Sanctuary by notification.	YES _____ No _____	_____	_____	_____	(18)
2.2 The intention declared to constitute it into a National Park, by notification.	YES _____ No _____	_____	_____	_____	(35)
2.3. Proclamation issued by the Collector.	YES _____ No _____	_____	_____	_____	(21)
2.4. Commencement of enquiry by the Collector, into claims preferred/otherwise existent.	YES _____ No _____	_____	_____	_____	(22)
2.5. Completion of such an enquiry.	YES _____ No _____	_____	_____	_____	
2.6. Passing of order, by Collector, of admitting or rejecting claims.	YES _____ No _____	_____	_____	_____	(24:1)
2.7. Ordering the exclusion, from the National Park/Sanctuary, No of any of the portions for which claims have been admitted.	YES _____ No _____	_____	_____	_____	(24:2(a))

* Where notification is under any Act/Legislation prior to/other than the Wildlife (Protection) Act, 1972, please specify which Act/Legislation.

- 2.8. Appointment of Settlement Officer YES _____ No _____
- 2.9. Execution of agreements between the government and owner(s) of such lands/rights which are to be included in the National Park/Sanctuary and for which claims have been admitted. (If more than one agreement, give date of completion of all) YES _____ No _____ (24:2(b))
- 2.10 Initiation of acquisition Procedures for lands/rights which are to be included in the National Park/Sanctuary and for which claims have been admitted. If more than one case, give dates of initiation of each). YES _____ No _____ (24:2(b))
- 2.11 Completion of acquisition procedures YES _____ No _____
- 2.12 Settling of appeals, if any. YES _____ No _____
- 2.13 Issuing of final notification for Park YES _____ No _____ (35(4))
3. Original area of Park/Sanctuary, as initially declared/notified. Hectares Date of declaration (18(1)) or _____ (35(1))
4. Present area of Park/Sanctuary (lands already acquired). _____ ha.
5. Alteration of boundaries since date of notification: (35:5)

Reference/date of resolution by State Legislature	Areas in Hectares		Reasons for adding/deleting.
	Added	Deleted or denotified.	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

6. Details of differences, if any, between 3 & 4

	Ra.	Year	With whom the present control/ ownership rests.	Were San- ctuary/Park authorities consulted about the exclusion.	Were written objections raised by Sanctuary/ Park autho- rities.
6.1 Due to exclu- sion of land as per Sect. 24:2(a)	_____	_____	_____	YES _____ No _____	YES _____ No _____
6.2. Due to non- completion of acquisition process.	_____	_____	_____		YES _____ No _____
6.3. Due to illegal occupation	_____	_____	_____		YES _____ No _____
6.4. Other (Please specify)	_____	_____	_____	YES _____ No _____	YES _____ No _____
	_____	_____	_____	YES _____ No _____	YES _____ No _____
	_____	_____	_____	YES _____ No _____	YES _____ No _____

7. What, if anything, has been done by the Park/Sanctuary authorities with regard to the situation of lands not yet under the management of the Park/Sanctuary authorities (listed under 5 above). Please list separately, as per serial numbering, and give details of action taken, if any, dates, and results.

15. Details of offences:

	No. of cases filed in					Of which (as on 31/3/84)		Of offenders against whom cases were filed during 79/80-83/84 how many were:				Maximum penalty/ fine awarded in the last five years for each category of crime *
	79	80	81	82	83	W	L	C	E	V	O	
	80	81	82	83	84							
1. Improper Entry (27:1)												
2. Improper conduct (27:2)												
3. Illegal Hunting (29:1)												
4. Causing Fire Hazard (30)												
5. Illegal Weapons (31)												
6. Illegal use of explosive etc. (32)												
7. Non Registration of arms (34:1)												
8. Destruction of Habitat (35:6)												
9. Illegal grazing/entry of cattle (35:7)												

* W = WON; L = LOST; C = COMPOUNDED; E = BEING PROCESSED;

** G = GOVT. SERVANT; V = VILLAGER; O = OTHER

1.4 Is the current policy and plan being followed in the Park/Sanctuary a continuation of earlier policies/plans, or was there drastic change(s) of policy at some point in the history of the Park? Please give details.

1.5 Has your Park/Sanctuary been divided up into core and buffer zones? YES _____ NO _____

If Yes, please give the following details.

1.5.1 Area of core zone (CZ) _____ ha.

1.5.2 Area of buffer zone (BZ) _____ ha.

1.5.3 Total area of Park/Sanctuary _____ ha.

Note: If zones have been further demarcated, kindly indicate area of each segment.

2. Equipment

2.1 Please list below the type and quantum of modern equipment available to help in the management of Park/Sanctuary.

Description	Nos. Proposed	Nos. available as on 31/3/84	Remarks
Wireless sets (fixed)	_____	_____	_____
Wireless sets (portable)	_____	_____	_____
Rifles/guns	_____	_____	_____
Binoculars	_____	_____	_____
Electronic tracking equipment	_____	_____	_____
Dart guns	_____	_____	_____
Infra-red viewers	_____	_____	_____
Other: (Please specify)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3.4 Please list, by name & designation, the officers incharge of the Park/Sanctuary from 1973-74 to 1983-84, giving the duration of each officer's tenure.

Name	Designation	Incharge of the Park		Posting immediately prior to the Park	Posting immediately after the Park
		From	To		
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

4. Protection Measures

4.1 Please give details of any staff specially deputed for protection:

	Designation of personnel	Number of personnel	Length of shift	Equipment provided
Mobile squad	_____	_____	_____	_____
Check point duty	_____	_____	_____	_____
Special beat duty	_____	_____	_____	_____
Vigilance duty	_____	_____	_____	_____
Police	_____	_____	_____	_____
Other	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

4.8.1 Give details of water logging/drainage problems in your Park:

Nature of problem	Area ha. affected	Impact on ecology	Remedial measures taken
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

4.8.2 If there are any other recurring problems in Park/Sanctuary due to natural reasons, please give details below, yearwise from 1979-80 to 1983-84, giving nature of problem, periodicity of occurrence, quantum of damage & remedial measures.

4.9 Is a vaccination programme undertaken actively for cattle in the Park/Sanctuary and its surrounding villages?

Park/Sanctuary YES NO Surrounding villages YES NO

4.9.1 Approximate percentage of livestock vaccinated from:

Park/Sanctuary villages _____

Villages adjacent to Park/sanctuary _____

4.10 Where highways/public roads pass through the Park/Sanctuary, do you check whether the cattle passing through have been vaccinated?

Always Occasionally Never

4.11 Do quarantine facilities exist at entrance to Park? YES NO

4.12 Give details of epidemics among wildlife of rinderpest, foot and mouth disease, rabies or any other diseases:

Year	Name of disease	Species of fauna affected	No. of fauna affected		Possible cause of disease	Preventive measures taken
1979-80						
1980-81						
1981-82						
1982-83						
1983-84						

4.13 Give details of epidemics/disease/affectation by pests of plants in your Park/Sanctuary, as per the proforma below:

Year	Name of disease	Species of Plants affected	Area(ha) affected		Possible cause of disease	Preventive measures taken
			CZ	BZ		
1979-80						
1980-81						
1981-82						
1982-83						
1983-84						

4.14 Give details of perceived over-population of any species of fauna in the Park/Sanctuary as per the proforma below:-

	Species over populated	Probable cause of over population	Possible effect on eco-system	Preventive/curative measures taken including use of pesticide
1979-80

1980-81

1981-82

1982-83

1983-84

4.15 Give details of the spread of any flora species in a quantum greater than considered healthy for the Park eco-system (this includes spread of noxious weeds, etc.), in the proforma below.

	Name of species (common & scientific)	Probable cause of this spread	Possible effect on the eco-system	Preventive measures taken including use of herbicides
1979-80

1980-81

1981-82

1982-83

1983-84

4.16 Give details, of any threatened species of fauna in your Park, in the proforma below:

	Name of species	Estimated population	Perceived causes for decreasing population	Measures taken to protect/regenerate the species
1979-80				
1980-81				
1981-82				
1982-83				
1983-84				

4.17 Please give details, of any threatened species of flora in your Park, in the proforma below:

	Name of species (common and scientific)	Estimated incidence in Park	Probable cause of decline	Measures taken to protect/regenerate these species
1979-80				
1980-81				
1981-82				
1982-83				
1983-84				

5. Park Activities

5.1 Please give details of forest use activities taking place in the Park/Sanctuary, in the format given below:

	Allowed in				Est. revenue generated for Dept. (for 1983-84)
	CZ		EZ		
i. Felling of trees for timber	YES _____	NO _____	YES _____	NO _____	Rs. _____
ii. Collection of fallen trees for timber	YES _____	NO _____	YES _____	NO _____	Rs. _____
iii. Cutting of trees for pulp and for other industrial use	YES _____	NO _____	YES _____	NO _____	Rs. _____
iv. Cutting of trees for fire-wood	YES _____	NO _____	YES _____	NO _____	Rs. _____
v. Lopping of branches for firewood	YES _____	NO _____	YES _____	NO _____	Rs. _____
vi. Collection of twigs/leaves for fuel	YES _____	NO _____	YES _____	NO _____	Rs. _____
vii. Cutting/collecting of:					
a) Herbs/plants	YES _____	NO _____	YES _____	NO _____	Rs. _____
b) Fruits	YES _____	NO _____	YES _____	NO _____	Rs. _____
c) Roots	YES _____	NO _____	YES _____	NO _____	Rs. _____
d) Bark	YES _____	NO _____	YES _____	NO _____	Rs. _____
e) Seeds	YES _____	NO _____	YES _____	NO _____	Rs. _____
f) Flowers	YES _____	NO _____	YES _____	NO _____	Rs. _____
g) Cocoons	YES _____	NO _____	YES _____	NO _____	Rs. _____
h) Grasses	YES _____	NO _____	YES _____	NO _____	Rs. _____
i) Leaves	YES _____	NO _____	YES _____	NO _____	Rs. _____
j) Bamboos	YES _____	NO _____	YES _____	NO _____	Rs. _____
_____	YES _____	NO _____	YES _____	NO _____	Rs. _____

5.2 Please give details of plantation work taking place in the Park:

	Total area (ha) planted with trees in the		Area planted (ha) in terms of proposed uses			
	CZ	BZ	Wildlife habitat	Fuel wood	Commercial timber	Other
1979-80	-----	-----	-----	-----	-----	-----
1980-81	-----	-----	-----	-----	-----	-----
1981-82	-----	-----	-----	-----	-----	-----
1982-83	-----	-----	-----	-----	-----	-----
1983-84	-----	-----	-----	-----	-----	-----

5.3 Please give details of the species of trees planted in mixed plantations in the proforma below: *

Name of species (scientific & common)	Area (ha) planted in core zone					Area (ha) planted in buffer zone				
	79	80	81	82	83	79	80	81	82	83
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	80	81	82	83	84	80	81	82	83	84
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

5.4 Please give details of mono-culture plantations, in the proforma given below:

Name of species (scientific & common)	Area (ha) planted in core zone					Area (ha) planted in buffer zone				
	79	80	81	82	83	79	80	81	82	83
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	80	81	82	83	84	80	81	82	83	84
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

* Estimate area under each species separately.

5.5 Do you allow fodder from the Park to be cut and taken out?

YES _____ NO _____

5.5.1 If Yes, who does the cutting:

Department _____ Contractor _____ Actual users _____

5.5.2 How many persons are involved in cutting at one time _____

5.5.3 Who is it sold to _____

5.5.4 How is it priced (please tick mark the right answer and give amount in Rs., where relevant):

- a) At market rate ____, i.e., Rs. _____ per kg
- b) At less than market rate but above costs ____, i.e., Rs. _____ per kg
Difference from market rate is Rs. _____ per kg.
- c) At cost price _____, i.e., Rs. _____ per kg.
- d) At subsidised rate _____, i.e., at Rs. _____ per kg.
Rate of subsidy is Rs. _____ per kg.

5.5.5 What quantum, per annum, do you allow to be cut _____ quintals

5.5.6 What percentage of the Park area do you allow to be used for this

_____ %

5.5.7 Do you follow a system of rotational fodder removal?

YES _____ NO _____

5.5.8 Do you think there are any problems with the above systems?

YES _____ NO _____

If Yes, please give details of the problems: _____

5.7 Indicate what percentage of the Park/Sanctuary is open to tourists, and by what mode of transportation, as per the proforma below:

	Percentage of area open to tourists, as per their modes of transportation in		Number of visitors using this mode of transport in 1983-84
	Core zone	Buffer zone	
Foot	_____	_____	_____
Cycle	_____	_____	_____
Cycle rickshaw	_____	_____	_____
Animal back	_____	_____	_____
Animal drawn vehicle	_____	_____	_____
Two wheeler	_____	_____	_____
Motor vehicles (private)	_____	_____	_____
Motor vehicles (Departmental)	_____	_____	_____
Other (Please specify)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

5.8 Are the areas open to tourists rotated periodically? YES ___ NO ___

5.9 If Yes, what is the periodicity? _____

5.10 Do Park/Sanctuary officials have full & final say on which areas of the sanctuary should be open to visitors? YES ___ NO ___

5.11 If not, who has a say in this, and how much? Please elaborate

5.12 Do Park/Sanctuary officials have full and final say in the mode of travel, activities, etc., of visitors in the Park? YES _____ NO _____

5.13 If not, who has a say in this, and how much? Please elaborate.

5.14 Please give whatever details you can about the number of tourists/visitors who visited your Park in 1983-84

No. of overnight visitors (Foreign) _____

No. of overnight visitors (Indian) _____

No. of casual visitors _____

Total No. of Visitors _____

5.15 Is there a public thoroughfare or highway

through the Park? YES _____ NO _____

5.16 If Yes, please indicate approximately the number of persons passing through the Park, other than

those listed above- Approx. _____ persons per annum

5.17 Number of visitors on peak days _____

Rs.

5.18 Entry charges, if any: per person (Foreign) _____

per person (Indian) _____

per car _____

per bus _____

Other (Pl. specify) _____

5.19 Do you allow use of flood lights for night viewing? YES _____ NO _____

5.23 What are the future plans, if any, for extending tourist facilities in the Park/Sanctuary? Please give details.

.....
.....
.....
.....

5.24 What are the best months for visiting your Park/Sanctuary, and why?

Months	Reasons
.....
.....
.....
.....

6. Association of NGOs and Environmentalists:

6.1 Are there any non-governmental organisations associated with/active in your Park?

YES _____ NO _____

6.1.1 If Yes, please give details of such association/activity, and the name(s) and address of these organisations:

.....
.....
.....
.....
.....
.....
.....
.....
.....

6.2 How many Honorary Wildlife Wardens are active in relation to your Park?

.....
.....

PART III

GEOGRAPHICAL, BIOLOGICAL & SOCIAL DATA

This part is designed to yield basic data on the geography, biology and human population of the area.

GEOGRAPHICAL

1. Please attach a contour map, if available, or any other map giving the following details. (Where maps do not already exist, the preparation of a map of this type will not only be useful for the purpose of this questionnaire, but could provide many useful insights to you for Park management). If adequate maps already exist, it is not necessary to follow the coding laid down in the questionnaire. However, if new map is being made then coding specified should be followed.
 - i Park boundary - Unbroken black line - also specifying area actually acquired, under acquisition and subsequently excluded, separately.

Indications, along the boundary, of the type of adjoining habitat (eg., reserve forest, agricultural land, etc.).
 - ii Core area boundary - Broken black line.
 - iii Roads : Highway (double red unbroken line)
 Metalled (single red unbroken line)
 Unmetalled (single red broken line)
 - iv Railway: (Single black line crossed with black lines)
 - v Water resources: Mark rivers, lakes, tanks, dams, canals and all other significant water sources in blue, giving names, followed by (p) for Perennial and (NP) for Non-perennial.
 - vi Tourist buildings (TE)
 - vii Staff quarters (SQ)
 - viii Offices (Off)
 - ix Range headquarters (RHQ)
 - x Check points (in red) Manned (M)
 - xi Watch towers (WT)/animal and bird enclosures (Encl.)
 - xii Man made physical protective structures along Park boundaries (compound wall, double black unbroken line).
 - xiii Villages - (Vill) Within Park and adjacent i.e. within 10 k.m. of boundary of Park.

- xiv Social forestry or fodder plantations (in green)
- xv Illegal encroachments (Shade area in pink)
- xvi Fire lines (double black broken lines)
- xvii Areas that you propose should be added to the Park/Sanctuary (Shade area in yellow and specify)
- xviii Vegetation types, using different patterns for each type (different types of forests, grasslands, etc.) and specifying on map.
- xix Flood control embankments (FCE)
- xx Water pipelines (WPL)
- xxi Corridors for power transmission lines (PTL)
- xxii Approximate location of activities by other departments/organisations, specifying department and activity (give your own code and specify)
- xxiii Recreation/picnic areas (Rec)
- xxiv Salt licks (SL)/water points (WP) used by fauna - specifying man made (mm) - and natural (nat).
- xxv Visitors information centre (Inf)
- xxvi Highest point (HP) and lowest point of Park (LP)
- xxvii Nature trails (Trls)
- xxviii Any other important features (please give code).

2. Please complete the following

2.1 Size

- | | | |
|--------------------------------------|------------------|----------|
| a) Core Zone or Sanctum (at present) | _____ | hectares |
| | (proposed) _____ | hectares |
| b) Buffer Zone (at present) | _____ | hectares |
| | (proposed) _____ | hectares |
| c) Total area of Park/ (at present) | _____ | hectares |
| Sanctuary (proposed) | _____ | hectares |

2.2 Location

a) Districts(s) within which Park/Sanctuary falls

b) Latitude _____ to _____

c) Longitude _____ to _____

d) Nearest Town _____ Distance _____ Kms

e) Nearest Railroad _____ Distance _____ Kms

f) Nearest Airport _____ Distance _____ Kms

2.3. Topography

a) Average elevation of area above mean sea level in meters

b) Highest point is _____ metres above mean sea level

c) Lowest point is _____ metres above mean sea level.

2.4. Climate

a) Summer months are from _____ to _____

b) Mean summer temperature is _____ °C

c) Hottest days generally occur in the month of _____

with temperature rising to _____ °C

d) Rainy months are from _____ to _____

e) Mean annual rainfall is _____ millimeters

f) Winter months are from _____ to _____

g) Mean winter temperature is _____ °C

h) Coldest days generally occur in the month of _____

with temperature falling to _____ °C

BIOLOGICAL

3 Vegetation

3.1 Indicate the status of the following tree genera in the natural vegetation of the Park/Sanctuary by marking C = Common, P = present, R = rare in the space against the tree genus:

- | | | |
|-------------------|-------------------|-------------------|
| 1. Abies | 2. Acacia | 3. Acer |
| 4. Actinodaphne | 5. Adina | 6. Albizia |
| 7. Aleimandra | 8. Altingia | 9. Anogeissus |
| 10. Aphanamixis | 11. Artemisia | 12. Artocarpus |
| 13. Aivcennia | 14. Bauhinia | 15. Beilschmiedia |
| 16. Betula | 17. Bombax | 18. Bridelia |
| 19. Euchanania | 20. Calligonum | 21. Calophyllum |
| 22. Capparis | 23. Caragana | 24. Careya |
| 25. Carissa | 26. Castanopsis | 27. Cedrus |
| 28. Chloroxylon | 29. Cinnamomum | 30. Cissus |
| 31. Cleistanthus | 32. Croton | 33. Cullenia |
| 34. Cycas | 35. Dillenia | 36. Dipterocarpus |
| 37. Disopyros | 38. Drypetes | 39. Elaeocarpus |
| 40. Engelhardtia | 41. Ficus | 42. Garuga |
| 43. Gluta | 44. Gordonia | 45. Hardwickia |
| 46. Holigarna | 47. Humboldtia | 48. Juniperus |
| 49. Kingiodendrum | 50. Lagerstroemia | 51. Larix |
| 52. Lyonia | 53. Machilus | 54. Manilkara |
| 55. Meliosma | 56. Memecylon | 57. Mesua |
| 58. Michelia | 59. Olea | 60. Palaquium |
| 61. Persea | 62. Phenolobium | 63. Phoebe |
| 64. Picea | 65. Pinus | 66. Pistacia |
| 67. Poeciloneuron | 68. Prosopis | 69. Pterocarpus |
| 70. Pterospermum | 71. Punica | 72. Quercus |

- 3.2 Please give estimated area, in ha., according to revised classification of forest types as per Champion & Seth:

Forest type/ sub-type code	Area in Hectares	Forest type/ sub-type code	Area in hectares
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

- 3.3 Please indicate any plant species, including grasses, of particular interest found in the Park/Sanctuary area. Please give special emphasis to rare or endangered species.

- 3.4. Have any species of flora been introduced into the Park/Sanctuary?

YES NO

- 3.5. If so, please give:

Name of Species	Year of Introduction	Reason for Introduction	Current status
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

4.8 Do you provide artificial salt-licks for the animals? YES ___ NO ___

4.9 If Yes, please specify the number of salt-licks and the reason why artificial salt-licks have to be provided.

4.10 Do you artificially feed any of the fauna? YES ___ NO ___

4.11 If yes, please specify:

Species artificially fed	Diet given	Periodicity of feeding	Reasons for giving artificial feed	Mode of feeding
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

4.12 Do you have a Veterinarian attached to the Park? YES ___ NO ___

4.13 If No, where is the nearest Vet. located? Place _____
distance from Park _____ km.

SOCIAL

5. Human Population

5.1 Please give details of encroachment on Park area:

Year of detection	No. of encroachers	Impact on ecology	Action taken by Park authorities
1979-80	_____	_____	_____
1980-81	_____	_____	_____
1981-82	_____	_____	_____
1982-83	_____	_____	_____
1983-84	_____	_____	_____

5.2 Please give details of populations and villages in and around the Park/Sanctuary, in the proforma below:

	CORE ZONE	79/80	80/81	81/82	82/83	83/84
I	Total Number of Villages	-----	-----	-----	-----	-----
II	Number of forest villages	-----	-----	-----	-----	-----
III	Number of revenue villages	-----	-----	-----	-----	-----
IV	Total estimated Population	-----	-----	-----	-----	-----
V	Estimated percentage of these who are tribals or totally dependent on forests	-----	-----	-----	-----	-----
	BUFFER ZONE	79/80	80/81	81/82	82/83	83/84
I	Total Number of Villages	-----	-----	-----	-----	-----
II	Number of forest villages	-----	-----	-----	-----	-----
III	Number of revenue villages	-----	-----	-----	-----	-----
IV	Total estimated Population	-----	-----	-----	-----	-----
V	Estimated percentage of these who are tribals or totally dependent on forests	-----	-----	-----	-----	-----

SURROUNDING AREA (10 km. radius)		79/80	80/81	81/82	82/83	83/84
I	Total Number of Villages	-----	-----	-----	-----	-----
II	Number of forest villages	-----	-----	-----	-----	-----
III	Number of revenue villages	-----	-----	-----	-----	-----
IV	Total estimated Population	-----	-----	-----	-----	-----
V	Estimated percentage of these who are tribals or totally dependent on forests	-----	-----	-----	-----	-----

5.3 Please give details of village relocation since the setting up of the Park/Sanctuary, in the proforma below:

		From		
		Core Zone	Buffer Zone	Outskirts (10 kms radius from the Park boundary)
I	Proposed to be relocated by 31.3.84	-----	-----	-----
II	Total No. of villages relocated	-----	-----	-----
III	Of these:			
	No. of forest villages	-----	-----	-----
	No. of revenue villages	-----	-----	-----

5.7. Is compensation payable for livestock injured/killed by wild animals?

Inside Park YES ___ NO ___ Adjacent Area YES ___ NO ___

5.8. If yes, give details of compensation payable perhead of livestock:
(P = within Park; A = adjacent areas)

Cow		Buffalow		Goat		Sheep	
P	A	P	A	P	A	P	A

5.9. Is compensation payable regardless of the species of wild animal injuring/killing livestock?

YES ___ NO ___

5.10 If not, for which species of wild life injuring/killing livestock is compensation payable, and why?

5.11 Are there instances of livestock injured/killed by species of wild animals other than those listed in 5.10?

YES ___ NO ___

5.12 Please give information of cases/claims for cattle/livestock lifted by predators. (P=Within Park; A=Adjacent areas)

	79-80		80-81		81-82		82-83		83-84	
No. of cases:	P	A	P	A	P	A	P	A	P	A
known to have occurred	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
registered by villagers	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
accepted for compensation	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
rejected for compensation	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Reasons for rejection	_____									

PART IV

RESEARCH AND EDUCATION

This part is designed to get information regarding, on the one hand, the sorts of research that has been & is being done in the Park/Sanctuary and the facilities provided to researchers and, on the other, the educational and interpretational activities and facilities currently existing in the Park/Sanctuary.

1. RESEARCH

1.1 Please give details of research done in the past 5 years. If information on research done prior to this is available, please give this information as well:

Subject	Name, Designation and address of Investigator(s)	Year in which completed	Whether published, when & by whom	Are copies available with the Park authorities
_____	_____	_____	_____	YES <u> </u> NO <u> </u>
_____	_____	_____	_____	YES <u> </u> NO <u> </u>
_____	_____	_____	_____	YES <u> </u> NO <u> </u>
_____	_____	_____	_____	YES <u> </u> NO <u> </u>
_____	_____	_____	_____	YES <u> </u> NO <u> </u>
_____	_____	_____	_____	YES <u> </u> NO <u> </u>
_____	_____	_____	_____	YES <u> </u> NO <u> </u>
_____	_____	_____	_____	YES <u> </u> NO <u> </u>

1.2 Is any research presently being undertaken? Please give details of subject and investigator and expected date of publication of results:

- 1.3 Please indicate whether any of the following maps of the Park/Sanctuary are available with your office:

	Year of Preparation	% of Park area covered	Remarks if any
Vegetation Map	_____	_____	_____
Soil Map	_____	_____	_____
Rock Map	_____	_____	_____
Water Availability map	_____	_____	_____
Terrain Map	_____	_____	_____
Wildlife Distribution	_____	_____	_____
Aerial Photos	_____	_____	_____
Any other maps (please specify)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- 1.4 What equipment/facilities are available for research?

- 1.5 Do you have any full time research staff on the strength of the Park/Sanctuary? YES _____ NO _____

- 1.6 If yes, please give their particulars, including the Department they belong to, their qualifications & areas of specialisation and their length of experience in this & other similar appointments:

- 1.7 What, in your opinion, would be the priority areas for research in your Park/Sanctuary? Please give details on the nature of the problem, your plans, if any, to have this studied and any assistance/facilities required for the purpose:

- 1.8 Do you have any monitoring activities regarding the flora & fauna in your Park

YES NO

- 1.9 If Yes, please give details of activity, mentioning frequency, methodology, coverage and results:

- 1.10 Do you have any special/cheap/subsidised accommodation for researchers from other organisations? YES NO

- 1.11 If Yes, please give details of accommodation, rates and maximum duration of stay permissible:

2. EDUCATION/INTERPRETATION

2.1 Are the following available at the Park/Sanctuary?

(As on 31.3.84)

		For rent/sale reference/free distribution, visit (please specify)	Description
Maps of Park	YES NO		
Booklet on Park	YES NO		
Title			
Tape recordings of bird calls, etc	YES NO		
Slides on Wildlife	YES NO		
Films on wildlife	YES NO		
Reference Books on Wildlife	YES NO		
Photo Exhibition of fauna and flora	YES NO		
Museum of species	YES NO		
Zoo/animal or bird enclosures	YES NO		
Hides	YES NO		
Binoculars for use of visitors	YES NO		
Checklists/birds	YES NO		
Checklists/animals	YES NO		
Vehicles for tourists	YES NO		
	YES NO		
	YES NO		

- 2.2 Are slide shows/film shows held for Park visitors? YES NO
- 2.3 If No, why not _____

- 2.4 If Yes, approx number of shows held per annum _____
- 2.5 Are there any systematic programmes to educate villagers residing within the Park or in the peripheral villages? YES NO
- 2.6 If Yes, please give details on nature of programme

- 2.7 No. of villages covered p.m. _____ Total covered so far _____
- 2.8 Approx no. of visits to each village p.m. _____
- 2.9 Designation and number of personnel undertaking educational work

- 2.10 Results obtained, if any, through educational work undertaken so far:

- 2.11 Plans, if any, for future educational work:

- 2.12 Do you have a visitors centre? YES NO
- 2.12.1 If Yes, please give details of facilities provided there:

- 2.13 Number of trained guides, in your Park, if any, for visitors _____
- 2.14 Number of extension officers, if any, in your Park _____

- 2.15 Please give details of problems, if any, faced by you in undertaking educational programmes for visitors to the Park or for villages in and around the Park - and your suggestions:

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- 2.16 Are there any other educational or interpretational activities in your Park/Sanctuary? If so, please give details.

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- 2.17 Is your Park frequently visited by students/researchers?

YES NO

- 2.18 If Yes, please give estimated numbers visiting per annum:

Students per annum visiting the Park

Researchers per annum visiting the Park

PART V

PERCEPTIONS OF THE DIRECTOR OF THE PARK/SANCTUARY

This section is primarily designed to solicit your perceptions, based on your experience and expertise, regarding the proper management of the Park/Sanctuary and the better achievement of the ultimate objective of environmental conservation. Apart from your own perceptions and recommendations, you can also include here any other factual information, not covered elsewhere in this questionnaire, that you consider relevant.

1. Legal and Procedural

- 1.1 Do you think there are shortfalls in the Indian Wildlife (Protection) Act of 1972, and other relevant Acts, which make the SETTING UP of a Park/Sanctuary more difficult than necessary?

YES - NO -

- 1.2 If Yes, please state the shortfalls, specifying the Act, & suggest possible remedial measures.

- 1.3 Are there any problems with the rules and procedures followed for implementing that part of the Act(s) which deals with the SETTING UP of a Park/Sanctuary?

YES - NO -

- 1.4 If Yes, please state the problems, specifying the Act(s), rules and procedures, and suggest possible remedial measures.

- 1.5 Do you think there are short falls in the Indian Wildlife (Protection) Act and other relevant Acts, which make the PROTECTION AND MANAGEMENT of a Park/Sanctuary more difficult than necessary?

YES - NO -

- 1.6 If Yes, please state the shortfalls, specifying the Act, and suggest possible remedial measures.

- 1.7 Are there any problems with the rules and procedures followed for implementing that part of the Act which deals with the PROPER PROTECTION AND MANAGEMENT of a Park/Sanctuary?

YES - NO -

- 1.8. If Yes, please state the problems, specifying the Act(s), rules and procedures, and suggest possible remedial measures.

- 1.9 What changes would you recommend in legislation, administrative machinery or procedures to enable you to secure more successful prosecution of offences?

- 1.10 What is your estimate of the extent and nature of undetected offences, the main reasons for the same, and your suggestions in this regard, in relation to your Park?

- 1.11 What is your estimate of the extent of offences that are detected but are not prosecuted, the main reasons for non-prosecution and your suggestions in this regard, in relation to your Park?

- 1.12 Give the history of the legal status of your Park/Sanctuary. Was it earlier a private reserve, etc. Please give dates and other details.

- 1.13 Please give details of any other legal or procedural problem that you have perceived, and suggest possible solutions.

2. Management

- 2.1 Do you feel that you have all the powers and facilities needed to manage your Park/Sanctuary satisfactorily?

YES _ NO _

- 2.2 If no, kindly indicate the main handicaps you face and suggest how they can be removed.

- 2.3 Do you think the budget sanctioned for your Park/Sanctuary, is adequate to run it satisfactorily.

YES _ NO _

2.4 If not, please give detailed reasons for your answer.

2.5 Do you have the required equipment, in adequate quantities, to properly manage your Park/Sanctuary?

YES NO

2.6. If no, please give details of additional equipment required and reasons why this equipment is considered necessary.

2.7 Is the quantum of staff available, in the Park/Sanctuary, adequate?

YES NO

2.8 If no, please indicate additional staff required, giving justification for each and the functions they would be expected to perform.

2.9 Is the calibre of staff, in terms of experience, expertise & training, adequate in your Park/Sanctuary? YES NO

2.10 If not, please specify the changes you would recommend, giving justification for each.

2.11 Do you feel satisfied with the level of help & co-operation you get from other departments/agencies of the Government? YES NO

- 2.12 If not, please give details of the problems faced, and suggest, if possible, solutions.

- 2.13 Do you consider the people/livestock living in and around your Park/Sanctuary a threat to the well being of the Park/Sanctuary?

YES NO

- 2.14 If Yes, how could this threat be minimised/removed?

- 2.15 Do you consider the tourist activities in your Park/Sanctuary detrimental to the well being of the Park/Sanctuary?

YES NO

- 2.16 If Yes, how could these be better regulated, or should they be totally stopped? Please give a detailed answer.

- 2.17 Do you feel that adequate research activities are going on in your Park/Sanctuary? YES NO

- 2.18 If not, kindly indicate the areas in which you think research ought to be conducted, and why.

- 2.19 Do you think the boundaries of your Park/Sanctuary ought to be altered in terms of increase/decrease/change of present area?

YES NO

2.20 If Yes, kindly indicate what changes you would recommend & why.

.....

.....

.....

2.21 Do you think there are other areas around your Park/Sanctuary or in the region which ought to be converted into Parks/Sanctuaries?

YES NO

2.22 If so, please indicate what areas and give reasons as to why you want them converted.

.....

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.....

2.23 Do you consider a wild-life posting as something you welcome and prefer over other types of postings? YES NO

2.24 Give reasons for your answer.

.....

.....

2.25 Please give below any other information, suggestions or opinions that you like.

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2.26 Please give below a list of the postings you have had since the start of your service, upto the present.

Date	Designation	Location	Nature of duty
From	To		
.....
.....
.....
.....

