



MANGEMENT PLAN **RAJPARIAN** **WILDLIFE SANCTUARY** 2021 - 31



Compiled by
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DEPARTMENT OF WILDLIFE PROTECTION J&K GOVERNMENT



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FOREWORD

Rajparian Wildlife Sanctuary is situated in Anantnag District and represents typically temperate forest and wildlife. The administrative control of the sanctuary is under Wildlife Division, South. As per precedence, the sanctuary is being managed as per Annual Plan of Operations under various schemes.

For the first time, an attempt has been made to prepare a Management Plan for Rajparian Wildlife Sanctuary. In order to ensure the management on scientific basis, the present management plan for Rajparian Wildlife Sanctuary has been prepared with application of latest technologies and concepts of wildlife management.

This Management Plan has been prepared keeping in view the guidelines laid down by Shri W.B. Sawarkar. The implementation of plan shall become guiding mechanism for further planning and management of Rajparian Wildlife Sanctuary. It shall also serve as authentic document for scientific baseline data for future management.

I congratulate Shri Abdul Rouf Zargar, Wildlife Warden, South Division & his team for their hard work in preparation of this management plan. I also put on record the appreciation for efforts and guidance by Shri Rashid Yahya Naqash, Regional Wildlife Warden, Kashmir for completion of this document.

(Suresh Kumar Gupta) IFS



Rashid Y Naqash
Regional Wildlife Warden, Kashmir

PREFACE

Jammu and Kashmir represents the biogeographic (Zone 2 a & b) North- West Himalayas) region of the country, its lofty, snow swathed mountains, gushing rivers, Rocky cliffs, alpine deciduous conifer forests hold good and unique assemblage of floral and faunal biodiversity. These unique and variegated habitats offer important abodes to thousands of wildlife species in the form of Mammals, birds and plants etc. which are constantly facing threat through anthropogenic and natural activities, responsible to push the same at the brink of extinction, if the efforts are not implemented to arrest the pace of exploitation.

The valley of Kashmir is also explored with good potential of Wildlife Protected area network with National Parks, Wildlife Sanctuaries, Conservation Reserves and Wetlands. Among them the Rajparian Wildlife Sanctuary is home to assemblage of many rare and threatened Wildlife species which includes the Kashmir Musk deer (*Moschus cupreus*), Himalayan Langur (*Semnopithecus ajax*), Himalayan Black Bear (*Ursus thibetanus*), Common Leopard (*Panthera pardus*) and long tailed Marmot (*Marmota caudata*). Rajparian Wildlife Sanctuary holds different avifaunal species most of them take refuge during summer for breeding and come from far-off plain areas of adjacent countries. Besides, a large number of endemic bird species like pheasants, Magpie, Flycatchers and raptors do occupy the alpine conifers and green meadows of Rajparian Wildlife Sanctuary.

Since, Rajparian Wildlife Sanctuary used to be a vital corridor of Kashmir Hangul (*Cervus elaphus hanglu*) the critically endangered deer species, it also provides abode to threatened Kashmir Musk Deer and Himalayan Langur (*Semnopithecus ajax*), thus it was need of the hour to conceptualize a comprehensive Management Action Plan for the Wildlife Sanctuary to lay a scientific management planning frame work for providing a congenial habitat to its critically threatened and rare wildlife species, also to explore ways and means to identify the erstwhile corridor for the Kashmir Red deer and prescribe necessary interventions to retrieve and restore the corridor connectivity on landscape basis and to ensure that this species to recovers and thrives again in its past corridor in its earlier bastion Kishtwar upto Chamba valley of Himachal Pradesh. Emphasis has been laid while compiling the Management Action Plan for Rajparian Wildlife Sanctuary, the issues like pressure from local habitation, pastoral nomads and from the existing Sheep Breeding Farm are described in detail and possible solutions are recommended. It will enable the long term sustenance of sources for the endemic wildlife and for the upliftment of the dependents of the sanctuary.

The Management Action Plan for Rajparian Wildlife Sanctuary has been formulated for ten years i.e from 2021-2022 to 2030-2031 with the aim to preserve, propagate and to perpetuate the wildlife and its habitat therein.

The Management Action Plan (2021-31) has been formulated after collecting the baseline data, based on intensive research studies of topography, wild animal behavior, impact of environmental hazards and biotic interference on the overall habitat in the wildlife sanctuary. All aspects of conservation including management of wildlife habitat on scientific management interventions have been framed in the plan. Various ways and methods have been chalked out to completely eradicate the menace of poaching and to control illegal grazing in high alpine pastures through pastoral nomads and local grazers during summers. This planning will provide ample foraging fields of grazing and will eradicate any biotic pressure to the important wildlife species in core area of Sanctuary during summer. The present project plan aimed to regulate the aquatic balance of the watershed through implementing Soil and Water Conservation related measure.

Focus has been given on participatory approach by involving local communities for raising their livelihoods by involving them in Fire Management, Eco-tourism, Anti-poaching enforcement activities. Long term involvement of stake holders in management interventions will pave way for developing a hormonal relationship between local communities with strayed wild animals who are saved against human wrath.

Implementation of schemes highlighted in the Integrated Management Action Plan for a decade will be the basis for the long term and sustainable conservation strategy in the sanctuary, will ensure the pressure free habitat for the highly threatened wild animal species like Kashmir Musk Deer, Himalayan Black and Brown Bear, Grey Langur and will envisage a safe corridor for Kashmir Red Deer – Hangul. The plan execution will ensure wildlife species of adjacent areas like District Kishtwar area to thrill once again in the sanctuary. A cushion has been earmarked to strengthen the infrastructure, enabling hassle-free working of field staff in the sanctuary to achieve conservation goals.

The efforts put forth by Sh. Abdul Rauf Zargar- Wildlife Warden, South Kashmir Division and his team in finalizing the Integrated Management Plan of Rajparian Wildlife Sanctuary for long term conservation of its endemic wildlife treasure are applauded and appreciated.


Regional Wildlife Warden, Kashmir

ACKNOWLEDGEMENT

We are deeply indebted to Sh. Suresh kumar Gupta, IFS, Principal, Chief Conservator of Forests (Wildlife) / Chief Wildlife Warden, UT of J&K, who's primary initiative was to having a first Comprehensive Management Action Plan for Rajparian Wildlife Sanctuary for ten years. With out his able suggestions, expertise and able guidance compilation of this Management Action Plan was an uphill – task.

The contribution and suggestions put forth by Sh. Rashid Yahya Naqash , Regional Wildlife Warden – Kashmir Region from time to time for bringing out this Management Action Plan in its present form is highly accepted and applauded.

Wildlife/Forest (officers / Technical experts) like Sh. Tawheed Dewa, IFS, Conservator of Forest –South Circle , Sh. Irfan Ali Shah , IFS, Conservator of Forest (Working Plan - Circle),Dr. Sameena Charoo – Wildlife Warden / Research officer ,and other wildlife wardens involved in review of Management Action Plan from its embryonic stage to its final drafting with valuable suggestions , technical insertions and from research side , the role of all these officers/experts is highly appreciated.

We are highly thank full to Dr. Umar Zahid – Veterinary Assistant Surgeon – Department of Wildlife Protection ,J&K for his technical inputs in compilation of chapter deals with wild animal Disease investigations , treatment , practical and future suggestions to be adopted during the proposed Plan.

We would like to thank Sh. Sakib Hussain Poswal, Research fellow & his team for collecting base line Data , valuable inputs of biodiversity of Rajparian Wildlife Sanctuary and helping in compilation of this Plan.

The field work in identification of bird -fauna at Rajparian wildlife Sanctuary by Sh. Riyan Sofi (Ornithologist) with photographic evidences is appreciated, accepted and acknowledged.

We thank all the field staff at Rajparian Wildlife Sanctuary especially Sh. Imtiyaz Ahmad Wani – Range Officer, Bringi Valley Range, Sh. Nadeem Ahmad Dar (Forester) , Sh. Javid Ahmad Magray (Guard),Sh. Waheed Ahmad Bhat (Guard) , Sh. Mushtaq Ahmad Naik (Guard) Sh. Irshad Ahmad – Rehbar –i- Janglat for providing assistance to the deputed teams in collecting data and providing valuable material from the extracts of office record in compiling the Management Action Plan.

We wish to thank the staff at Division office especially Sh. M. Yaseen Bhat (Sr. Assistant), Sh Sajad Ahmad (Forester),Sh,Showqat Ahmad (Forester), Sh. Zahoor Ahmad (Guard) for providing valuable suggestions, inputs and field expertise in compiling this Plan.

The hard toil rendered by Sh. Hilal Ahmad Dar (Guard) and Ms. Asma Rehman for computing and compiling this Plan is appreciated.

Since this Management Action Plan was first of its kind for the Rajparian Wildlife Sanctuary it will not be free from errors but suggestions for improvement would be appreciated and would help to make it more management oriented.

Wildlife Warden
Wildlife Division (South)
Kashmir-Bijbehra.
& His Team

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PART-I

Introduction

The Jammu and Kashmir is the northern most part of India. Jammu and Kashmir is extremely rich in biodiversity, natural beauty and uniqueness with regard to the flora and fauna. The rapidly increasing population, infrastructure development is causing deforestation, depletion of natural resources and conditions of paucity. The Himalayas, which play a vital role not only in India but also in sub-continental economy, are in the grip of environmental degradation. The carrying capacity of the Himalaya is decreasing day by day due to the heavy pressure of both increasing human and livestock population. Historically, local communities were dependent on natural resources for their livelihood.

The Western Himalayan Union Territory of Jammu and Kashmir supports a diverse array of cultures, resource uses, and management traditions in spiritual beliefs. The Western Himalayan ecosystem, of which Jammu and Kashmir is a part, has been recognised as a repository of local conservation traditions that promote the careful use of natural resources in order to maintain a long-term sustainability and to support local socio-economic condition. However, these mountainous areas undergo rapid socio-economic and environmental changes due to hasty increase in population, forest degradation and developmental activities.

The Rajparian Wildlife Sanctuary possesses great conservation values as it holds a great diversity in flora and fauna. The Rajparian Wildlife Sanctuary is abode to one of the least studied animals on the Planet – The Kashmir Musk Deer (*Moschus cupreus*). The Rajparian wildlife sanctuary is considered as one of the important wildlife corridors particularly of the **Critically Endangered** Hangul (*Cervus hanglu hanglu*) in its relic population distribution. The Rajparian wildlife sanctuary holds finest populations of the Asiatic Black Bear, Himalyan Brown Bear, Himalyan Grey Langur and Rhesus Macaque. Besides these large Charismatic animals, the Rajparian Wildlife Sanctuary holds an excellent population of smaller mammals as well.

For the maintenance of the physical and demographic integrity of the site and rich wildlife resources in the Rajparian, the Rajparian Wildlife Sanctuary need more scientific management with a long term planning process. In the changing world, management of wildlife as a separate planning strategy is quite newer than the mainstream forest management. The current management plan is the first management plan, which is prepared by following the guidelines, developed by MoEF&CC and the manual for planning wildlife management in protected areas and in the forest management.

Though the management plan is written for the period of ten years, it is necessary to revise after the completion of the period on regular basis to incorporate and upgrade the changes, which are caused due to dynamic nature of habitat and accrued knowledge after research publications. It is felt that the management plan in the present condition is the big leap towards achieving set goals and objectives.

Wildlife Warden

South Kashmir Division
Bijbehara, Anantnag

Executive Summary Of The Management Plan

The Rajparian Wildlife Sanctuary has a great historical legacy of which its name is part. Prior to declaration of wildlife sanctuary Rajparian was a hunting reserve or 'Rakh' of the Maharaja of the erstwhile of the princely state of the Jammu and Kashmir. The Rajparian Wildlife Sanctuary has been notified as the Game preservation area vide cabinet order No. 710 – C of 1945, Notification Dated 17 – 07 – 1945.

The Rajparian wildlife sanctuary harbors a very rich and endemic flora and fauna. Its diversity ranges from the tall and lanky Pinus graffiti to short Berberis, bushes from the crisping birds to the Black Bear barks, from the gushing streams to extremely beautiful alpine pastures. Its harbors diversity from the aggressive Kashmir Grey Langur to shy Himalayan Musk Deer. Besides it provides an important corridor to the "Critically Endangered" Hangul. The Rajparian nallah along with Duksum nallah form an important tributary of the Kashmir's only river – the Jhelum. The Rajparian nallah is an important source of water not only to the wild creatures of the area but it caters the need of drinking water and irrigation needs of all the people living in the proximity of the Rajparian Wildlife Sanctuary.

The Rajparian wildlife sanctuary encompasses a notified area of 48.28 Km². However, there is no clear demarcation as of now, there is an urgent need of the demarcation of the area, and points should be taken using the latest technology of GPS and plotted on GIS. The wildlife sanctuary is administrated by the South wildlife Division of the Department of wildlife Protection, Jammu and Kashmir. Today Rajparian wildlife Sanctuary is managed under IUCN category I (Wildlife Sanctuary).

The management plan is written for ten years (2021-22 – 2030-31). It focuses on important aspects with the following objectives:

1. **To formulate Conservation strategies for the RET species**
2. **To Control grazing and other biotic interferences**
3. **To identify key research priorities and implement programs, to establish mechanism and create opportunities for enhancing management capabilities and knowledge of wildlife science**
4. **People's participation in wildlife conservation**
5. **To enhance the quality of educational, recreational, and wilderness experience given to the general public**
6. **Consistent with the above objectives in the zone of influence with sensitivity to cultural and economic well-being of the communities, reduce the dependency on forest based resources**
7. **Development of human resources and capacity building**

It comprises of the three parts:

Part one covers four chapters namely (Introduction, Background information, History of the management and present practices in the protected areas and the interface land use situation) respectively.

Part two of the plan covers rest of the eight chapters namely (Plan objectives and problems, strategies, Tourism interpretation and conservation Education, Eco-development, Research and monitoring, Organization and administration, the budget and the schedule of operations) respectively.

Part three comprises of various Annexures and control forms pertaining to the Sanctuary.

The objectives are well defined however there are a number of constraints/ problems in achieving these objectives. Some of the major constraints that have been identified are: Grazing in alpine pasture, fire in grasslands, soil run-off and problems related to infrastructure and communication needs of the Sanctuary. The Sheep breeding farm in the heart of the sanctuary and the recent increase in man-animal conflict reports are the problems of greater and some lesser magnitude, with greater implications for the future.

The strategies proposed in chapter-6 to tackle these problems are to divide the sanctuary in zones. Each zone has its own set of objectives and strategies for dealing with the problems, with the management having in today.

Nine theme plans for the management strategies of the Rajparian wildlife sanctuary that are applicable to the entire Sanctuary irrespective of their zones and have not been discussed in the chapter no.6 of the plan are listed here:

8. **Habitat management**
9. **Control of grazing and other biotic pressures**
10. **Control of poaching**
11. **Fire management**
12. **Watershed development and soil erosion control**
13. **Man – animal co – existence**
14. **Rescue, Rehabilitation and animal health monitoring**
15. **Capacity development and Human resource development**
16. **Development of infrastructure and capacity building**

Similarly, the chapter no. 7, 8, and 9 related with Ecotourism, Eco-development and Research and monitoring deal with the various measures for conducting the said activities.

Chapter no.10 talks about the present and proposed staff that would be required at Rajparian wildlife sanctuary for the proper management and protection. Chapter no.11 deals with the budget that would be required both at central and state level for accomplishing these activities. The total budget at present rate for the entire period of ten years would be ₹3683.3 Lac while the projected expenditure at 5% annual increase is to be enhanced annually.

All of the Annexures and the Control forms pertaining to Rajparian wildlife sanctuary are relevant towards formulation and execution of the management plan.

INTRODUCTION TO THE AREA

1.1 NAME, LOCATION, CONSTITUTION AND EXTENT

1.1.1 NAME AND HISTORY

Rajparian Wildlife Sanctuary has a great historical legacy of which its name is part. Prior to declaration of wildlife sanctuary, Rajparian was a hunting reserve or 'Rakh' of the Maharaja of the erstwhile of the princely state of the Jammu and Kashmir. Declaration of the Rajparian

as "hunting reserve" by the Maharaja was purely based on gaming and had nothing to do anything for the conservation of this area. Rajparian Wildlife Sanctuary derives its name from the fact that the area was strictly restricted to the gaming for Rajas and area begin to be known as "Raja pateh" which later became Raja Parian. The main nallah draining the sanctuary earlier was known as '**Rakh Nallah**' is also now known as Rajparian nallah. The Rajparian nallah along with the Daksum Nallah form one of the major feeding channel of the Jhelum – the premier river of the Kashmir valley.

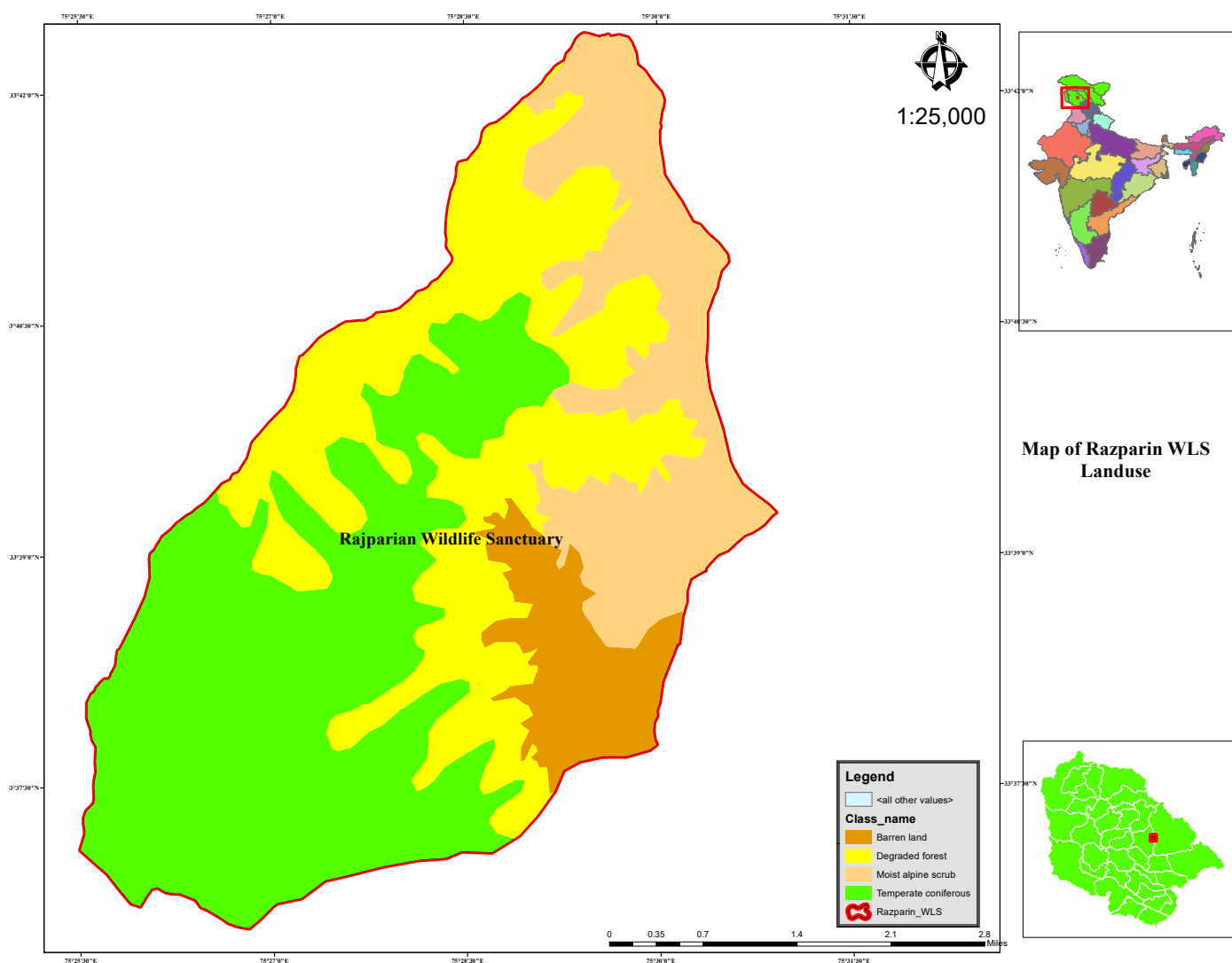


Fig.1. Location Map of Rajparian wildlife sanctuary

1.1.2 LOCATION

Rajparian Wildlife Sanctuary is located in the southern district of Kashmir in the Anantnag district, whose administrative headquarters lies as Wildlife Warden, South Division, at Bijbehara, Jammu and Kashmir. Rajparian Wildlife Sanctuary lies 110 Km away from the Srinagar city, summer capital of the UT of Jammu and Kashmir. It lies 50 Km away from the administrative headquarters in the South-East direction. The latitude and longitude extent of the Rajparian Wildlife Sanctuary falls between 33°36'30" to 33°42'30" N and 75°25'30" to 75°31'15" E. Rajparian Wildlife Sanctuary entirely falls within the civil jurisdiction of the Anantnag district. Rajparian Wildlife Sanctuary can be easily accessed by the road, as it is located on the Khanabal-Kishtwar highway. The nearest airport is located in Srinagar District at a distance of 130 Km, while as nearest railhead is Anantnag Railway station located at a distance of 52 Km.

1.1.3 CONSTITUTION

The area was a hunting reserve of the Maharaja for the long period. It was one of the areas to be notified as the protected area owing to its rich and endemic flora and fauna. Subsequently its management was handed over to Department of Fisheries and Game preservation and after the formation of Department of Wildlife Protection its control and management was handed over to this newly formed department. The Rajparian Wildlife Sanctuary has been notified as the "Game preservation area" vide cabinet order No. 710 – C of 1945, Notification Dated 17 – 07 – 1945 . (Annexure I). The area was elevated to the status of wildlife sanctuary in 1947. The wildlife sanctuary is administrated by the South Wildlife Division of the Department of wildlife Protection, Jammu and Kashmir. Today Rajparian Wildlife Sanctuary is managed under IUCN category I (Wildlife Sanctuary).

The Rajparian Wildlife Sanctuary is bounded by the territorial forest areas, which are contiguous to its boundaries. There are many villages located in the vicinity of the Rajparian Wildlife Sanctuary and managing the wildlife has become a challenge, particularly when the people around are extremely poor and entirely dependent on the protected area for food, firewood, grazing and NTFs collection.

1.1.4 EXTENT

The Rajparian Wildlife Sanctuary encompasses an area of 48.27 Km². However, there is no clear demarcation as of now, there is an urgent need of the demarcation of the area, and points should be taken using the latest technology of GPS and plotted on GIS. The clear demarcation of the area will be extremely helpful in managing the wildlife area in a better way, which currently is the biggest bottleneck in the management of the Rajparian Wildlife Sanctuary.

Name of the area	Area (in Km ²)	Date of notification	Section under which notified
Rajparian Rakh	48.27	17.07.1945	Game preservation Act Now managed under Indian Wildlife Protection Act 1972

1.2 APPROACH AND ACCESS

The administrative head of the Rajparian Wildlife sanctuary lies at Wildlife warden office of the South Division. The area can be accessed through Air, Railways as already discussed and through Roads from Anantnag of South Kashmir to Daksum 45kms.

1.3 THE STATEMENT OF SIGNIFICANCE

The Rajparian Wildlife Sanctuary harbors a very rich and endemic flora and fauna. Its diversity ranges from the tall and lanky *Pinus graffithi* to short *Berberis* bushes, from the chirping birds to the Black Bear barks, from the gushing streams to extremely beautiful alpine pastures. It harbors diversity from the aggressive Kashmir Grey Langur to shy Himalayan Musk Deer. Besides, it provides an important corridor to the **"Critically Endangered"** Hangul. The Rajparian nallah along with Duksum nallah form an important tributary of the Kashmir's only river – the Jhelum. The Rajparian nallah is an important source of water not only to the wild creatures of the area but it caters the need of drinking water and irrigation needs of all the people living in the proximity of the Rajparian Wildlife Sanctuary.

Some of the key significant conservation values of the Rajparian Wildlife Sanctuary are summarized as below:

- It holds a fine population of the Endangered Kashmir Musk deer.
- It holds a substantial population of the Endangered Himalayan Grey Langur.
- It is an important corridor and habitat to Kashmir Stag or Hangul.
- It is one of the main catchment areas of the river Jhelum.
- Rajparian nallah forms an important feeding tributary of the river Jhelum with Daksum nallah.
- Rajparian nallah is important source of drinking and irrigation water to the people living in its vicinity.
- *Pinus graffiti* and *Taxus wallichiana* with fine regeneration rate is an immaculate feature of the Rajparian Wildlife Sanctuary
- The alpine pastures are the indications of the diversified ecosystem of the Rajparian Wildlife Sanctuary
- Rajparian Wildlife Sanctuary harbors a great avian diversity.
- It offers substantial research, education and recreational values.

Rajparian Wildlife Sanctuary

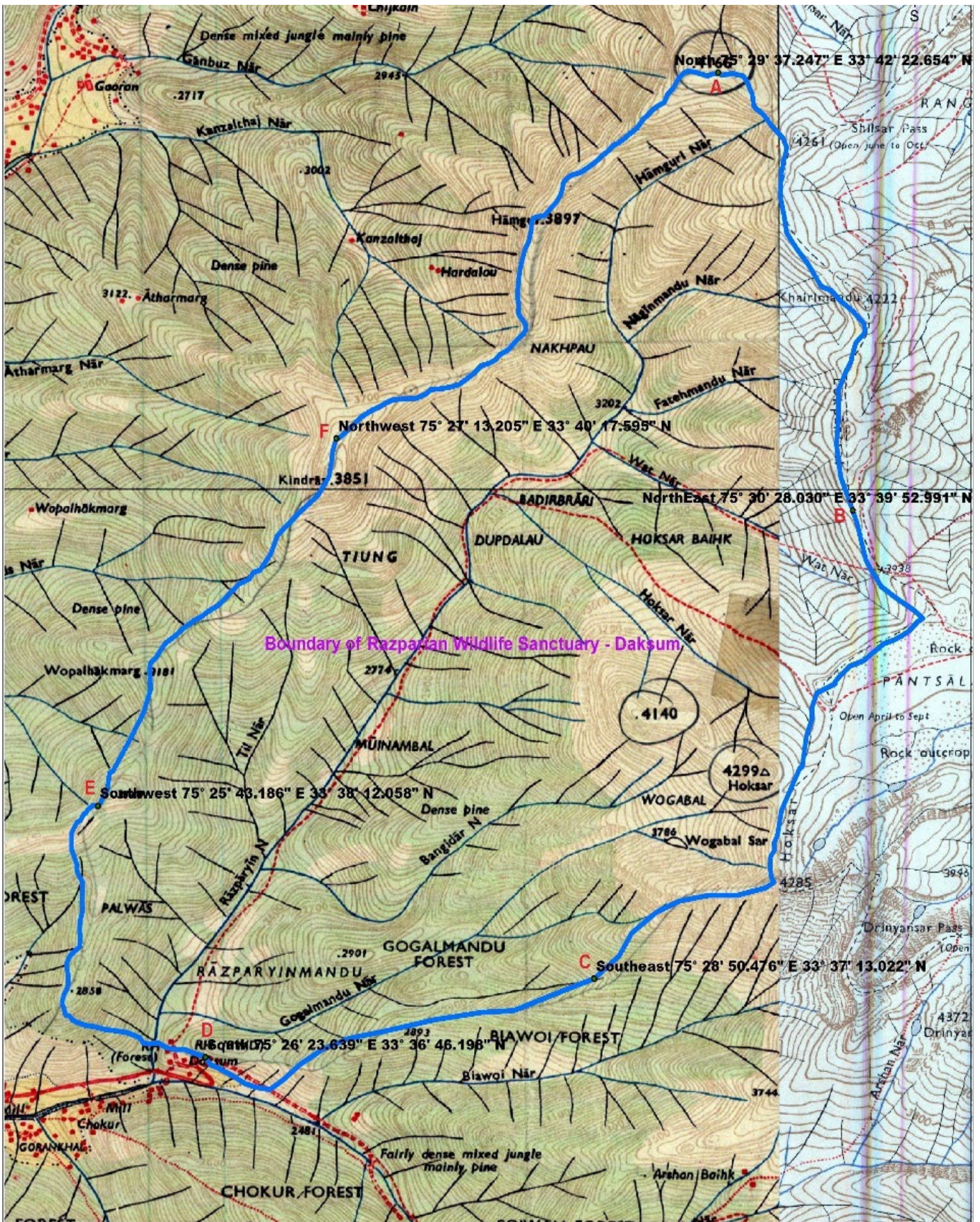


Fig.2. Map showing Rajparian Wildlife Sanctuary with drainage network

BACKGROUND INFORMATION AND ATTRIBUTES

2.1 BOUNDARIES

The Rajparian Wildlife Sanctuary came into existence in 1945, which described the boundaries of the Rajparian Wildlife Sanctuary. The wildlife sanctuary is delineated naturally from the territorial forest area, revenue land and village lands through alpine ridges, flowing streams of the Daksum Nallah, glaciers, upland margs and metallic road, which leads to the Anantnag district. The artificial chain-link fencing towards southern side are maintained to separate the area from the villages, state land and from forest areas. Owing to the lack of proper demarcation, using the latest technology there is a lot of chaos and confusion among the various departments such as Forest department, Kokernag Development Authority, Revenue Department and Department of wildlife protection, which has made the wildlife protection a more challenging job. There is an immediate need to demarcate the entire area on the modern lines using the GPS and GIS technology, which will enhance the management of the Sanctuary, which is abode to much diversified flora and fauna. The wildlife sanctuary is bounded by the mountain ranges such as Banker top on southern side and Tipo top on eastern side with average elevation of the 2600 m. The Northern boundaries of the sanctuary are bifurcated from Kishtiwari forest areas by lofty rocky cliffs, while as Southern boundaries by Daksum-Simthan-Kishtiwari Road and adjacent villages. The Eastern and Western boundaries fall in Territorial forests of Anantnag Territorial Forest Division. The boundaries are to be marked and pillars are to be inscribed to maintain the integrity of the area and for law enforcement.

2.2 GEOLOGY, ROCK AND SOIL

The entire area of the Rajparian Wildlife Sanctuary is mountainous and has crystalline structure with lime stones embedded. The soil depth at most places in the Rajparian Wildlife Sanctuary is less than 25 cm and hence fall in the category of shallow soils (Bhat, 1998). There are many places in the Rajparian Wildlife Sanctuary called "**Patharas**" which are composed of entirely limestone rocks and have very less soil depth. These Patharas are usually devoid of the tree vegetation but very rich in the herbaceous vegetation.

2.3 TERRAIN



The Rajparian Wildlife Sanctuary possesses Great Himalayan features with steep mountains separated with deep gorges, valleys. The series of undulations present a variety of slope aspects supporting an array of vegetation types. The overall terrain in Rajparian Wildlife Sanctuary is steep mountainous.

2.4 CLIMATE

2.4.1 RAINFALL DISTRIBUTION AND PATTERN

The climate of the Rajparian Wildlife Sanctuary is of sub-Mediterranean type having two spells of dryness from April – June and September – November. The area observes erratic weather conditions with considerable variation in the amount and distribution of the rainfall. Snow is the main source of precipitation and melts until June.

2.4.2 TEMPERATURE SUMMARY

The Kashmir valley experiences four distinct seasons: winter (December – February), spring (March – May), summer (June – August), and autumn (September – November). The Rajparian Wildlife Sanctuary experiences a temperate climate with cool summer and chilling winter. The mean month wise temperature recorded in the area was not possible as no meteorological station is established at Daksum area.

2.4.3 HUMIDITY

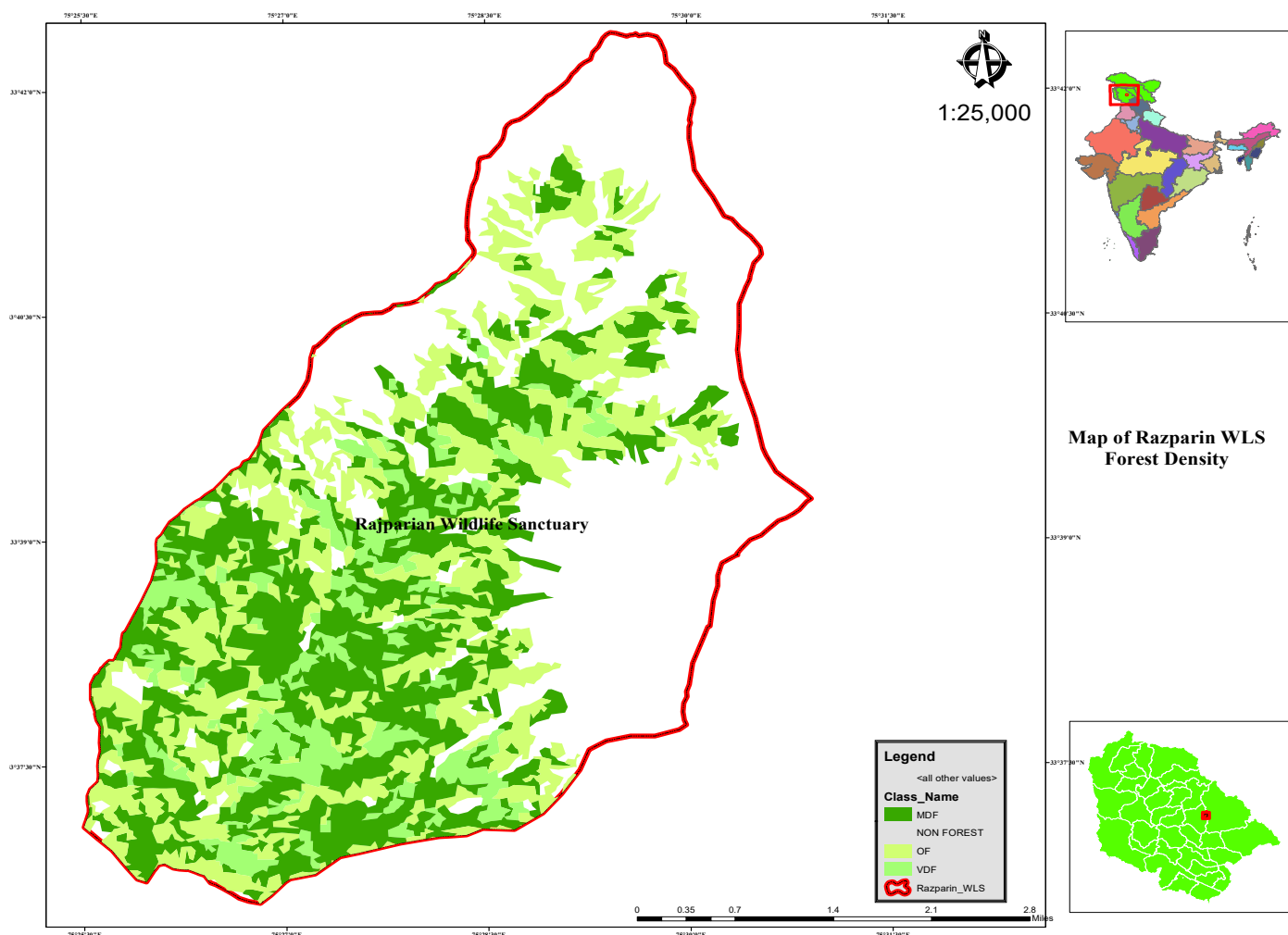
The relative humidity of Rajparian Wildlife Sanctuary is generally low during most part of the year. The maximum humidity is recorded in spring.

2.4.4 DROUGHT

The Rajparian wildlife sanctuary is bestowed with the Perennial nallahs, streams and springs hence, there are no chances of drought in the protected area. There is no history of drought since last 30 years and hence does not need any management activity.

2.4.5 WATER SOURCES

Rajparian wildlife sanctuary is gifted with immense perennial water resources in the form of snow originating nallahs and springs, because of which there is adequate water availability throughout the year. Different tributaries of the Sanctuary form the main Rajparian nallah which feeds the protected area and is one of the main tributary of the river Jhelum. Apart from the main Rajparian nallah there are nearly about 23 small to medium nallahs flowing through the protected areas. The Rajparian wildlife sanctuary is having a vast network of the springs. One of the peculiar feature of the Rajparian wildlife sanctuary is presence of many Sulphur water springs, prominent among them is Nun wan Nag, which attracts a good number of fauna towards it.



2.5 RANGE OF WILDLIFE, STATUS DISTRIBUTION AND ATTRIBUTES

2.5.1 VEGETATION

The vegetation of the Rajparian wildlife sanctuary typically falls in the Temperate, Sub – alpine and Alpine forest types as per the new and revised classification of the Champion and Seth (1968). There is a great diversity in the vegetation of the Rajparian wildlife sanctuary owing to the variation in altitude, aspect, soil, slope and exposure. The vegetation of the area is very patchy. The tree species such as *Ulmus wallichiana*, *Rhus succedanae*, *Populus cilita*, *Aesculus indica*, *Morus alba* and

Salix babylonica are also found along the streams and nallahs. The Rajparian wildlife sanctuary harbors best vegetation of *Pinus graffithi*, and *Piscea smithiana*. The upper reaches of the Rajparian wildlife sanctuary are dominated by the Birch (*Betula utilis*) and Rhododendron species. The shrub species are evenly distributed throughout the wildlife sanctuary. The commonly found shrubs are *Rosa webbiiana*, *Rosa indica*, *Berberis lyceum*, *Berberis artista*, *Indigofera heterantha*, and *Rubus niveus* besides many other species.

2.5.2 VEGETATION AND HABITAT MAPING OF RAJPAR- IAN WILDLIFE SANCTUARY

The vegetation map of the Rajparian wildlife sanctu-

ary was prepared using the Landsat data IRS-1D LISS-III sensor using ArcGIS9.1, ERDAS 8.4 software program. The Topo sheets of Rajparian wildlife sanctuary in the scale of 1:50000 were digitized. For the vegetation characterization in Rajparian, vegetation sampling was carried out throughout the Sanctuary. The vegetation data was analyzed for the plant community classification in Sanctuary.

For the vegetation type delineation in Rajparian wildlife sanctuary hybrid method (supervised, un-supervised and rule based classification) was used. A unique color was given to all different vegetation types. Maximum likelihood

classification method of classification was adopted for the false color classification.

Based on the results of TWINSpan analysis and field survey we classified the vegetation of Rajparian wildlife sanctuary into following type:-

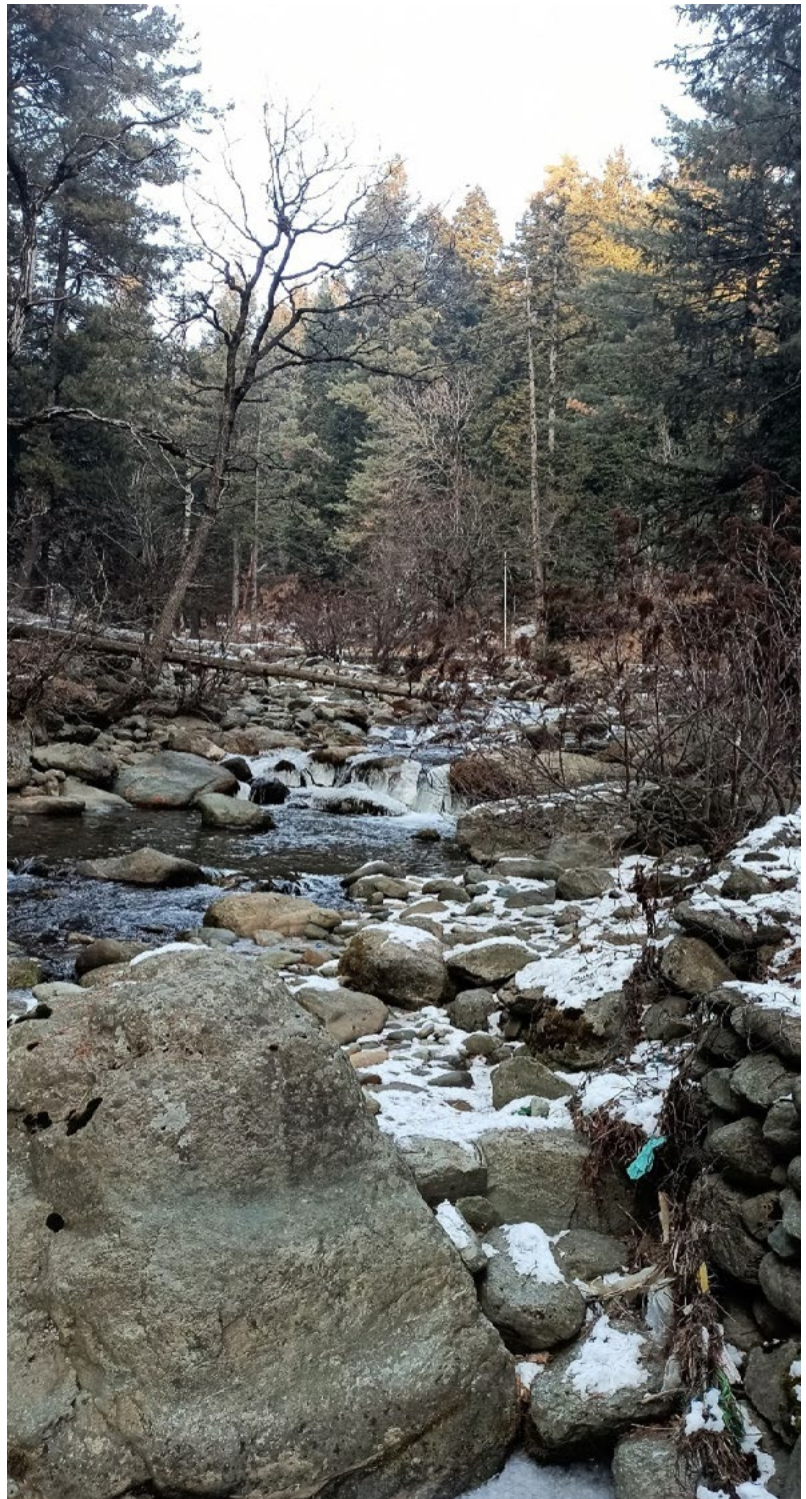
- Riverine vegetation
- Temperate Coniferous vegetation
- Mixed coniferous vegetation
- Sub- alpine and scrub forests
- Alpine pastures and scrubs
- Rocky faces or Patharas

(Annexure II)

RIVERINE VEGETATION

The riverine vegetation is mainly confined along and to the sides of tributaries of Rajparian nallah from the entrance of the Sanctuary up to Khattan Pathri with an average elevation of 2200 m. This type of vegetation is mainly dictated by the local as "ed-hapho" – climatic conditions of the area. This type of vegetation is mainly comprised of the broad leaved species with shrubs and bushes intercepted between them. The riverine vegetation mainly comprises of the species such as *Aesculus indica*, *Juglans regia*, *Rubinia pseudoacacia*, *Morus alba*, *Morus nigra*, *Quercus incana*, *Rhus succedana*, *Celtis australis*, *Celtis Caucasia*, *Prunus persica*, *Ulmus wallichiana*, *Ulmus villosa*, *Corylus colurna*, *Pardus cornuta* and *Salix babylonica*. One of the peculiar features of the riverine vegetation of Rajparian Wildlife sanctuary is presence of abundant vegetation of *Salix babylonica* with a good regeneration rate. The riverine vegetation is occasionally mixed with the conifers such as *Pinus wallichiana* and *Pinus graffithi*. The ground floor of the riverine vegetation comprises of many shrub species such as *Rosa webbiana*, *Rosa indica*, *Berberis lyceum*, *Berberis artista*, *Viburnum grandifolium*, *Rubus niveus* and *Indigofera heterantha*. The species such as *Desmodium*, *Jasmine* and *Isodon* too exist in the riverine vegetation of Rajparian Wildlife Sanctuary.

The riverine vegetation provides habitat and shelter to a variety of animals and harbors extremely rich avian diversity. The riverine vegetation is home to most of animals particularly during the winter season when the upper reaches are inaccessible and snow covered. It provides shelter and food to **"Endangered"** Himalayan Grey Langur (*Semnopithecus ajax*), Asiatic Black Bear (*Ursus thibetanus*) and Rhesus Macaque (*Macaca mulata*). Besides providing shelter and food to other animals, it is extremely rich in bird diversity and species such as Streaked Laughing Thrush, Variegated Laughing Thrush, Cinereous Tit, Green Backed Tit, Kashmir Nut-cracker and many other species of the birds can be easily sighted out.

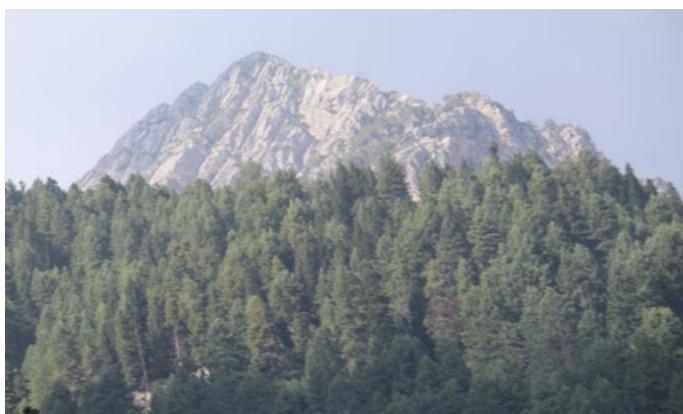


TEMPERATE CONIFEROUS FOREST

The most amazing and striking feature of the Rajparian wildlife sanctuary is the tall lanky and evergreen aggregation of the evergreen coniferous vegetation. The coniferous forest in the Rajparian Wildlife Sanctuary is the evergreen association of *Pinus graffiti*, Blue pine (*Pinus wallichiana*),

Spruce (*Picea smithiana*), Fir (*Abies pindrow*) and Himalayan Yew (*Taxus wallichiana*). The Rajparian Wildlife Sanctuary has abundant coniferous vegetation with good regeneration rate. The coniferous forests start right from the entrance of the sanctuary with average elevation of 2500 m. The coniferous forests at Rajparian wildlife sanctuary are at some places mixed with the broadleaved species such as Horse chestnut (*Aesculus indica*), *Quercus incana*. At the tops and rocky cliffs, the Spruce (*Picea smithiana*) is found to be grown in association with the Himalayan Blue Pine (*Pinus wallichiana*) with *Indigofera heterantha* shrub growing on floor. At some places, broad-leaved species such as Birch (*Betula utilis*) is found mixed with the *Pinus graffiti* and Spruce (*Picea smithiana*). Besides the shrub species such as *Soboriea tomentosa*, Rosa species, Viburnum species are found in an intricate association with the coniferous vegetation. The coniferous forests at Rajparian Wildlife Sanctuary is home to most of the fauna and avian life found in the protected area. It is home specifically to "Endangered" Kashmir Musk Deer (*Moschus cupreus*). Besides Musk Deer, the coniferous forests harbor animals such as common Leopard (*Panthera pardus*), Himalayan Yellow Throated Martin (*Martes flavigula*). The coniferous forests are an abode to a variety of bird life such as Kashmir Nutcracker, Black and Yellow Grosbeak, Orange Bullfinch, Brambling, Black kite and Tawny owl.

MIXED CONIFEROUS VEGETATION



The mixed coniferous vegetation is found in middle and upper reaches of the Rajparian Wildlife Sanctuary with an average elevation of 2700 – 3400 m. The open and exposed slopes are occupied primarily with the pine trees such as *Pinus wallichiana* while the spruce is confined to the areas less exposed to the sunlight primarily along the nallah and streams of Rajparian Wildlife Sanctuary. The dominant tree species are *Pinus graffiti*, *Taxus wallichiana* and *Abies pindrow*. The coniferous vegetation occurs in association with certain shrub species such as *Isodona plectranthoides*, *Indigofera*

heterantha, and *Rosa webbiana*. The small silver fir patches are mixed up with *Rosa macrophylla*, *Viburnum grandifloium*.

SUB-ALPINE AND SCRUB FORESTS



The sub – alpine forests in the Rajparian Wildlife Sanctuary are mostly dominated by the Birch (*Betula utilis*) and occurs in areas having average altitude of 3500m or above. The dominant tree species of the sub – alpine forest area in the Rajparian are *Betula utilis*, *Rhododendron anthopogon*, *Rhododendron campanulatum*, *Juniperus recura* and *Picea smithiana*. The dominant herbs, which form ground cover, are *Anemone obtusiloba*, *Sieversia elata*, *Aster thomsonii*, *Iris hookeriana*, *Fragaria vesca*, *Primula* and *Stachys sericea*. This forest type is mainly found in area of Kangraz, Tipo top and Hokesar top.

ALPINE PASTURES



ROCKY FACES / PATHARAS

The upper reaches of the Rajparian Wildlife Sanctuary are full of luxurious pastures, which form the core area of the protected area, as they are key in conservation of the rare, threatened and endangered (RET) species of the sanctuary. Since number of wild animal species migrate in these pastures in summers, they face an immense biotic pressure in the form of excessive illegal grazing both from the livestock of the sheep breeding farm present inside the sanctuary as well as from nomadic grazers and local people of the fringe areas. These pas-

tures, meadows are distributed over an average altitude of 3500 – 4200 m. The meadows are composed of perennial mesophytic herbs with very little grasses. Conspicuous amongst the herbs are *Primula spp.*, *Anemone spp.*, *Fritillaria imperialis*, and *Iris spp.*, *Gentiana spp.* with many Ranunculaceae, Cruciferae, and Compositae and Caryophyllaceae species. This type of habitat is extremely important to the Critically Endangered Hangul, Kashmir Musk Deer and many other RET species of the wildlife species.

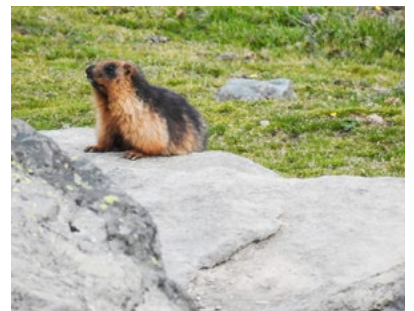


composed of the gravel and lime stones. Prior to declaration of the wildlife sanctuary these areas were used for cultivation of the potatoes as they are getting an abundant sunlight. These areas are usually devoid of the vegetation except for the ground cover. The vegetation found in the rocky faces or Patharas is confined mostly to the hilltops and gullies called 'Nars' and are represented by coarse grasses, *Juniperus* species and *Rhododendron* species.

2.6 FAUNA

The Rajparian Wildlife Sanctuary is home to a variety of fauna ranging all over the phyla of vertebrates, represented by large number of birds, mammals and reptiles. A detailed checklist of the mammals of Rajparian wildlife sanctuary is given in annexure (Annexure III).

The rocky faces or the "Patharas" are the special and peculiar feature of the Rajparian Wildlife Sanctuary. The soil depth in these areas is less than 25m mostly



KASHMIR MUSK DEER



The Rajparian Wildlife Sanctuary is abode to the “**Endangered**” Kashmir Musk Deer (*Moschus cupreus*). The Rajparian Wildlife harbors a good and viable population of the Musk Deer with a preferential habitat and availability of food round the season. The Kashmir Musk Deer is considered as “**Endangered**” and falls in **Appendix I** as per International Union for Conservation of Nature and Natural Resources (IUCN) (IUCN, 2020). The Musk Deer is placed in the Schedule I as per Wildlife Protection Act 1972, as their population is declined due to illicit hunting and habitat degradation. Musk deer belongs to the genus *Moschus* in the monotypic family of Moschidae. The Musk deer species are endemic to the Palearctic region inhabiting the isolated fragmented habitats such as the Kashmir Himalayas, Tibetan Plateau and adjoining areas in China and Far East (Pan *et al.*, 2015). The Musk Deer species demand specialized habitats, as they are habitat specialist solitary animals. The Musk Deer species usually inhabit area in the alpine shrub lands and above the tree line in the alpine meadows with an average altitude of 2600 – 4000 m. There are currently seven species of the Musk Deers recognized all over the world and out of these five are reported from the Indian Himalayan range viz., Kashmir Musk Deer (*Moschus cupreus*), Alpine Musk Deer (*Moschus chrysogaster*), Himalayan Musk Deer (*Moschus leucogaster*), Forest Musk Deer (*Moschu berezovskii*) and Black Musk Deer (*Moschus fuscus*) (Grubb, 2005). The Kashmir Musk Deer is one of the least studied species of the all musk deers as it has a limited fragmented zoo – geographical distribution. Even the baseline information on the distribution, ecological studies and genetic analysis are still not available. There is an urgent need to undertake a full-fledged study of the Kashmir Musk deer at Rajparian Wildlife Sanctuary on the population estimation and ecological parameters, which will be detrimental in long-term conservation of this endangered species in the long run.

Threats

- Presence of Sheep Breeding Farm with excessive population of the other livestock is one of the major threats faced by the Endangered Kashmir Musk Deer which increases the competition over food and space besides being potential source of the zoonotic diseases.
- Grazing competition from the livestock of Sheep

Breeding Farm as well as from the grazers of nomadic pastoralists.

- Illicit poaching for “musk” is also one of the major threats faced by the Kashmir Musk Deer
- Habitat degradation.

HANGUL

The Kashmir Red Deer or Hangul (*Cervus hanglu hanglu*) declared as separate species and categorized as “**Critically Endangered**” as per the IUCN (IUCN, 2020) owing to its declining trend in the population. Hangul is placed in the **Schedule I** as per Wildlife Protection Act, 1972 amended up to 2015. Hangul is placed in **Appendix I** as per CITES, thus prohibiting its international trade of any sort. Hangul shows different preferences to varied habitats in different seasons. The availability of food resources, shelter and escape cover from the predators (Ahmed *et al.*, 2015) also determine this preference. The recent studies have shown that Hangul is mixed feeder. It ingested disproportionate amounts of browse in almost all seasons, and bark-stripped woody species. The Hangul feeding habits varied according to resource availability in different seasons and constituted mainly dicotyledonous shrubs and trees, forbs and herbs and monocotyledon grasses and herbs in spring and winter, respectively (Ahmad *et al.*, 2015). The winter diet mainly constituted browse (trees and shrubs) although in significant number of sightings, Hangul was observed debarking on trees. During spring, the diet of Hangul deer comprised mainly forbs, beside grasses/sedges, and browses. During summer, the percentages of grasses and sedges increased in the diet to 19.05 and 28% respectively, while forbs constituted 42.86 and 60% with browse (trees and shrubs) constituting 38.10 and 12%. Among the monocots, the species consumed by Hangul in maximum sightings were *Carex cernua*, *Panicum crusgalli*, *Poa annua* and *Hemerocallis fulva*. In addition, debarking on *Prunus ceracifera* and *Parrotiopsis jacquemontiana* has been reported in autumn and on *Pinus wallichiana*, *Lonicera quinquelocularis* and *Parrotiopsis jacquemontiana* during winter, and root Knelling (debarking) by Hangul in both spring and winter on the introduced *Robinia pseudo-*



acacia is also reported (Ahmad *et al.*, 2015).

As the Hangul is frequent seasonal migrant and may be passing to the relic habitats of the Kishtwar from Rajparian Wildlife Sanctuary, using the corridor of the Rajparian wildlife sanctuary, there is an urgent need to identify the important corridors. These corridors are to be maintained properly through habitat management and protected from any sort of the anthropogenic pressures.

Threats

- Declining sex ratio and fawn to female ratio is the main cause of concern in long – term conservation of Hangul.
- Poaching was considered as the chief factor of the declining population of the Hangul. However, owing to tireless efforts of the Department of wildlife protection and regular patrolling by the frontline staff poaching has been largely stopped.
- Livestock grazing particularly in the summer habitat of the Hangul is now a greater cause of concern and great management problem to be tackled by the department. It not only increases competition in food and shelter but also acts as a potential source of pests and disease communicable to the Hangul in particular and other animals in general.

LEOPARD



The Leopard is the top carnivore of the Rajparian Wildlife Sanctuary. Leopard is categorized as **“Vulnerable”** by IUCN red list category. It is placed in **Appendix I** of CITES because of its extensive hunting had depressed populations. In India it figures in the **Schedule I** of the Wildlife Protection Act, 1972 amended up to 2015. Leopard is the most widely distributed of all the wild cats in the world (Nowell and Jackson, 1996). The geographical distribution of leopard extends throughout Africa, central Asia, South-east Asia and north Amur valley in Russia. Leopard is found throughout the Indian sub-continent with the exception of deserts, the Sundarban mangroves, and densely settled areas (Khan 1986, John Singh *et al.*, 1991). Leopard is found to be distributed in all forest areas of Kashmir up to tree line. It is the most Common wild animal in Kashmir after Asiatic Black bear in the UT of Jammu and Kashmir. The

Rajparian Wildlife Sanctuary provides a good habitat to harbor a very good and viable population of the leopards, however there has been a little studies or surveys done to estimate the population or ecological parameters.

The increase in reporting of Leopard-human conflict cases in the nearby villages of Rajparian Wildlife Sanctuary has become most common threat to the survival of Leopards. There are instances of retaliatory killing of leopards by local villagers to reduce conflict in the state. There is a need for the long-term study on leopard ecology in Rajparian Wildlife Sanctuary under which ecological aspects such as population, habitat uses, ranging and movement patterns should be covered.

ASIATIC BLACK BEAR



There are eight species of the Bears found worldwide of which four viz. The sloth bear (*Melursus ursinus*), the Asiatic black bear (*Ursus thibetanus*), Himalayan brown bear (*Ursus arctos*), and the sun bear (*Helarctos malayanus*) are found in India. The Asiatic Black Bear is having ubiquitous distribution in the UT of Jammu and Kashmir. It is found in every protected area of the Kashmir and in almost every territorial forest area. The Asiatic Black Bear is listed as **“Vulnerable”** as per IUCN Red Data Book (IUCN, 2020). It is listed in Appendix I as per CITES and placed in Schedule I as per Indian wildlife Protection Act 1972, amended up to 2015. The Rajparian Wildlife Sanctuary holds a very fine and viable population of the Black Bears. The habitat of the Rajparian is perfect to harbor finest populations of the Black Bears. However, there have been a little studies on the population and ecology of the Black Bears in the Rajparian Wildlife Sanctuary. It is prescribed in the current management plan to undertake a full-fledged survey and census to estimate the population of the Black Bear in the Rajparian Wildlife Sanctuary.

Threats

Black Bears are threatened due to poaching for gall bladder as (medicine), skin for (ornamental), retaliatory killings to reduce bear-human conflicts, and due to large-scale habitat degradation or loss. Because of these threats, the black bear population in India is decreasing in many areas. Existing information on black bear in India is either anecdotal or insufficient for effective conservation and

management. A few short investigations (Schaller 1969; Manjrekar 1989; Saberwal 1989; Sathya kumar 1999, 2001, 2006; Sathya kumar and Viswanath 2003, Sathya kumar and Choudhury, 2008) on black bear have been carried out so far in India. Black bear-human conflicts is an important management issue that needs to be addressed on priority basis as depredation of agricultural/ horticultural produce by black bears have resulted in the resentment of the local people who suffer such losses leading to retaliatory killings and animosity with the government departments.

HIMALAYAN GREY LANGUR

The Himalayan Grey Langur (*Semnopithecus ajax*) is species of grey langurs belonging to the family Cercopithecidae. The Himalayan Grey Langur also known as Kashmir Grey Langur or '**Handsome Langur**' due to its beautiful face and structure. The Himalayan Grey Langur was earlier considered as a sub – species of the Hanuman Langur (*Semnopithecus entellus*) but got its species status recently. International Union for Conservation of Nature and Natural Resources (IUCN) has classified the Himalayan grey langur (*Semnopithecus ajax*) as "**Endangered**" in 2008 (IUCN, 2020). This species is listed on CITES **Appendix I**,

and **Schedule II Part I**, of the Wildlife Protection Act, 1972 amended up to 2002 (Molure *et al.*, 2003). The Himalayan Grey langur can be distinguished from the other grey langur species by their large body dimensions and thick silver dark colored hair on the outer sides of both the fore and hind limbs (Wilson and Reeder, 1992). The Rajparian Wildlife Sanctuary holds a good population of the Himalayan Grey langurs whose habitat ranges from the entrance to the sub – alpine region of the sanctuary. The Himalayan Grey Langurs seasonally migrate from upper areas to lower riverine areas during the winter season and vice versa during the summer season. They mainly occupy the riverine broadleaved forest areas during the winter season due the availability of food and easy access to the water sources.

Threats

All the primate taxa including the Himalayan grey langur are under severe threats. The common and major threats, which Himalayan or Kashmir grey langur faces throughout its habitat range include the habitat loss and degradation through illegal and unethical encroachment, overgrazing, building of roads through its home range and lopping of forest trees for domestic cattle, thus depriving them of food, deforestation,



Plate 2. Troop of Himalayan Grey Langur grooming along the Rajparian Nallah

forest fires, unchecked and unregulated expansion of agricultural lands at the cost of forest ecosystems, unavailability of food during certain periods of the year, predation by large carnivores and several bacterial and viral diseases. The present and future threats are mainly due to ever-increasing expansion of agricultural land at the cost of forest ecosystems and other developmental activities.

OTHER ANIMALS



Plate 4. Brown Bear at Rajparian wildlife sanctuary

Besides, from the above mentioned animals, the Rajparian Wildlife Sanctuary is also having a good population of the Himalayan brown bear (*Ursus arctos*), Himalayan yellow Marten (*Martes flavigula*), Red fox (*Vulpes vulpes*), Jackal (*Canis aureus*), Small Indian civet (*Viverricula indica*), Rhesus macaque (*Macaca mulatta*), Leopard cat (*Felis bengalensis*), Common Mongoose (*Herpestes edwardsi*) and long tailed marmot (*Marmota caudata*).



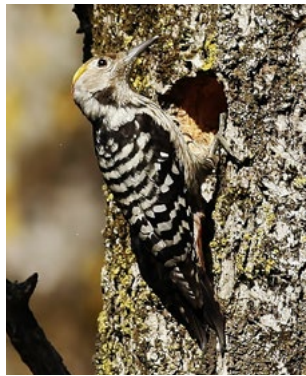
AVIAN DIVERSITY

The Rajparian wildlife sanctuary supports an extremely rich and varied avian diversity. A detailed checklist of the birds of Rajparian wildlife sanctuary is given in (Annexure IV)

2.7 LIMITING FACTORS

Factors limiting the range, movement, food, shelter otherwise affecting the general well-being of the wildlife population may be stated as absent. Habitat loss is the main limiting factor for the survival of wild animal species such as black bear, Hangul, leopards. Increased pressure on forests by local villagers for grass cutting, livestock grazing in upper reaches and on pastures of Rajparian Wildlife Sanctuary is becoming one of the main limiting factor for the survival of its biodiversity. The presence of sheep breeding inside the core area of the sanctuary is one of the main hurdles in the management of the protected area. The sheep department has internally fenced the sanctuary by barbed wires thus segregated the area, hampering the movement of the wild animals besides anti-poaching and anti-grazing patrolling of field staff is confined inside the sanctuary.

Another major hindrance is the presence of Kokernag Development Authority structures in close proximity of the sanctuary. These structures mainly include the huts, hotels and restaurants. These generate a huge amount of trash, which not only attracts the wild animals particularly Black Bears but also increasing the Human – wildlife conflicts and polluting the Sanctuary area and the Rajparian Nallah as well.



HISTORY OF MANAGEMENT AND PRESENT PRACTICES

3.1 GENERAL

The Rajparian Wildlife Sanctuary falls under the administrative control of South wildlife Division of the Kashmir region. The Rajparian Wildlife Sanctuary before declaration as the 'wildlife sanctuary' was a hunting reserve for the Maharaja of the erstwhile princely state of Jammu and Kashmir. The Rajparian Wildlife Sanctuary has not very long history of the management plans and was entirely managed based on the Annual Plan of Operations (APO) after it was declared as a 'wildlife sanctuary'. However, it is felt that the protected area cannot be managed without having a proper and valid management plan, hence the current management plan is formulated on the scientific line based and on the guidelines provided by the MOEF & CC, New Delhi(India).

This management plan is for the period of ten years from 2021-22 – 2030-31. This Management Action Plan will mainly focus on protection, conservation and habitat improvement strategies. The key managerial practices, interventions and strategies proposed by this management plan are as under:-

1. Careful rechecking of boundary dilatations and demarcation using the latest tools such as GPS and GIS to eliminate the confusion what so ever exists between various stakeholders.
2. Formulation and implementation of zone plans in terms of dividing the area into core, buffer and tourism zone.
3. Regulation of tourism.
4. Development of theme plans are proposed for the following activities:
 - Control of poaching and grazing
 - Weed control
 - Fire management
 - Man animal coexistence
 - Development of infrastructure and communication

Besides this, the current management plan will lay the foundation strategies for Conservation, Education, Eco development wherein emphasis will be laid on alternative livelihood generation, mitigation of man animal conflict,

compensation schemes and last but not the least research, monitoring and training will be brought to the central focus for the effective management plan of the Rajparian Wildlife Sanctuary. It will be for the first time that the management of Rajparian Wildlife Sanctuary will be done through a well-documented management plan with budget strategies for a period of ten years while it will be scientifically evaluated and a comprehensive financial plan formulated.

3.2 TIMBER OPERATION INCLUDING FIREWOOD HARVEST

The objective of creating the Rajparian Wildlife Sanctuary was the protection of endemic and diverse flora and fauna. Every type of illegal activities like hunting, trapping of animals and timber operations were completely banned to protect the diverse flora and fauna. Prior to declaration of the wildlife sanctuary some part of the Rajparian Wildlife Sanctuary was included as a part of "coupe" and felling of trees were done as per the prescribed working plan code. However, after the declaration of wildlife sanctuary, every sort of felling is abolished and completely banned.

3.3 NON-TIMBER FOREST PRODUCE COLLECTION

The people whose majority belong to the ST community surround sanctuary. Besides they are much-marginalized-farmers, hence they heavily depend upon the resources of the sanctuary. The NTF collection still goes on in some upper areas of the Rajparian Wildlife Sanctuary particularly during the summer season.

3.4 LEASES

No lease has been given in the sanctuary area under the control of Wildlife Warden South, although the sheep-breeding farm exists inside the sanctuary on an area of more than 1600 acres, prior to the declaration of the sanctuary.

3.5 OTHER PROGRAMMES AND ACTIVITIES

One of the biggest hurdles in the management of Rajparian Wildlife Sanctuary is the presence of the sheep breeding Farm encompasses over an area of more than 1600 acres. The authorities of the sheep-breeding farm

have internally fenced the core area of the sanctuary, hampering the movement of wild animals inside the protected area forcing them to invade nearby habitations, resulting in man-wildanimal conflicts. Another big concern is the presence of hampered structures of Kokernag Development Authority lies in close proximity of the sanctuary, which also poses a big challenge to the frontline staff in performing their regular patrolling duties.



Plate 5. Sheep Breeding Farm structures inside the sanctuary (Illegally raised gate hampering the patrolling of wildlife staff)



Plate 6. Flock of sheep in front of sheep shed inside the Rajparian wildlife sanctuary



Plate 7. Kokernag Development Authority (KDA) restaurant structure in close proximity of Rajparian Wildlife Sanctuary

3.6 FOREST PROTECTION

3.6.1 LEGAL STATUS

The Rajparian Wildlife Sanctuary has been legally notified as wildlife sanctuary in the year 1981. The legal status of the sanctuary has been already discussed in the chapter one.

3.6.2 HUNTING

Before the declaration of Rajparian as wildlife sanctuary, it was a hunting reserve of the Maharaja of Kashmir. After the area was notified as wildlife sanctuary, there is blanket ban on the hunting of any sort.

3.6.3 ILLEGAL ACTIVITIES

All the management practices so far executed in the Rajparian Wildlife Sanctuary are mainly directed towards the protection of the RET species. Constant and intensive patrolling has been made a thrush activity in order to remove any apprehension of the poaching in and around the wildlife sanctuary.

3.6.4 LIVESTOCK GRAZING

The livestock grazing particularly during the summer season in upper areas of Rajparian Wildlife Sanctuary is one of the major challenges the frontline staff is facing. Besides grazing, tens of thousands of the livestock trespass through the corridors of sanctuary while moving to other areas of

the territorial forest area and upper reaches of Kishtwar District. The summer habitat of the wild animals is getting disturbed due to excessive grazing particularly during the summer season coupled with the danger of spreading epidemics which always remains threat for wildlife in Rajparian Wildlife Sanctuary.

3.6.5 FOREST FIRES



Natural forest fires are not common in the region however, accidental fires may result in the woodland areas of the sanctuary because fire spreads from grasslands. One of the major causes of fire in Rajparian Wildlife Sanctuary is the extent of forest fires from the territorial forest areas. Making of fire lines to the fire sensitive areas remains almost a routine activity every year and hence forms an important component of fire management. Besides this, the department has to procure various firefighting equipments and fire proximity suits in order to enhance the effectiveness of firefighting and providing protection to the field staff.



3.6.6 WILDLIFE HEALTH (Insect attacks and pathological problems)

Since the inception of the wildlife sanctuary, no out-break of insect attacks or any pathological problem has been noticed. However, the presence of cattle along the fringe areas possesses the threat of outbreak of rinderpest and foot and mouth disease. Vaccination is being carried out in these areas but incidents and frequency needs to be increased in order to avoid any unwanted disease spread. The reach of immunization of livestock needs to be extended to livestock of nomadic grazers.

3.7 ECO-TOURISM

Jammu and Kashmir has a tourism-based economy as it is gifted with everlasting natural beauty right from the glaciers to the lush green meadows, from the gushing streams to the high altitude lakes, the Kashmir is truly "**Heaven on the Earth**". The Rajparian Wildlife Sanctuary has a vast potential of the eco-tourism and can be projected as a premier destination. However, owing to the lack of any eco-tourism plan the full potential of the wildlife sanctuary is yet to be harvested. The current management plan holistically deal with the eco-tourism management on the modern scientific basis by evaluating the carrying capacity of the sanctuary and strengthening the management – people cooperation through Eco – Developmental programs.

3.8 RESEARCH AND MONITORING

The rich biodiversity and unique ecosystem of the Rajparian Wildlife Sanctuary require well established, scientifically proved data/ information/ studies to act as an effective management tool for the conservation of habitat and wildlife. Many studies/ research projects have been carried out by individuals/institutions mainly for academic interests. There has not been much of systematic recording and retrieval of information at the PA level for use in the management. The details of the studies are given separately in the chapter on research and monitoring in the management plan.

3.9 COMMUNICATION

Main source of communication remains the mobile phone network, which does not offer a reliable mode of communication due to lack of connectivity in upper reaches. Wireless communication would have been an ideal mode of communication but due to security reasons, it is not recommended under the prevailing situations.

3.10 SUMMERY OF THREATS TO WILDLIFE

Grazing in some areas of the sanctuary, through local live stock, nomadic pastorals, and through grazing of sheep from sheep breeding farm in upper elevations during summers poses a great threat of an epidemic from these illegally entrants. Human – animal conflict, forest fires, establishment of adjacent tourist infrastructure and close human habitations to the boundary of the Rajparian Wildlife Sanctuary are the main threats to the endemic wildlife of sanctuary.

THE PROTECTED AREA AND THE INTERFACE LANDUSE SITUATION

4.1 THE EXISTING SITUATION IN THE ZONE OF INFLUENCE

The Rajparian Wildlife Sanctuary is having huge zone of influence. There are 11 villages located on the periphery of the Rajparian Wildlife Sanctuary with an estimated population of more than 3000. Besides a number of nomadic grazers and tribes men settle in the vicinity of the sanctuary particularly during the summer season. The people living in close proximity of the boundary of Rajparian Wildlife Sanctuary are mostly poor belonging to the schedule caste and schedule tribe communities. The livelihood of these people is mainly the cattle grazing, subsistence farming with very small land holdings, poultry and other diary activities. Most of the households collect fuel wood from either the sanctuary or other forest areas for cooking and heating purpose. This is one of the routine activities performed by the people living at the fringes of the sanctuary. The people living near the wildlife sanctuary bear some negative impacts

of the protected area in the form of crop raiding, orchards raiding and loss of livestock due to straying of wild animals from the Sanctuary. Traditionally the fringe residents are conservation oriented and therefore extent of alienation is not very significant but today because of increase in crop damage and livestock depredation by black bear and leopard, the attitude is changing.

4.1.1 LOCATION, EXTENT, BOUNDARIES, NATURAL ATTRIBUTES OF THE ZONE OF INFLUENCE

The zone of influence of the Rajparian Wildlife Sanctuary extends in the areas from Gugnar, Kandipora, Chakora, Gorankal, Upperpora, Harpora, Dangibal, Maqdampora, Junction, Kolipora, Daksum, Kralpora and Bagandar. The revenue villages located on the boundary will be entrusted for the eco-development activities owing to the fact that livelihood of these villages are affected by the existence of the protected area.



Plate 6. Landscape picture-showing mosaic of forested habitats and crop land



Plate 6. Horticulture cropland near the boundary of Rajparian Wildlife Sanctuary



4.1.2 VILLAGES INSIDE AND OUTSIDE THE PROTECTED AREAS

There is no settlement at present inside the Rajparian Wildlife Sanctuary. Before being declared, as the wildlife sanctuary, the area of the Rajparian was a hunting reserve or 'Rakh' of Maharaja of Kashmir. There are no records of the settlement inside the wildlife sanctuary. However, the presence of the sheep – breeding farm inside the sanctuary on an estimated area of more than 1600 acres increases the biotic interference in a negative way.

The main communities living in the zone of influence of Rajparian Wildlife Sanctuary are Gujjars and Bakarwals belonging to mainly ST and SC communities. The main occupation of these communities is cattle grazing and subsistence farming with very small land holdings.

The socio-economic condition of these communities is extremely poor. Sometimes these communities are also involved in the firewood and NTFs collection inside the protected area. The list of the villages surrounding the Rajparian wildlife sanctuary is given in detail in (Annexure V) is given below.

Details of Human / Cattle Population of villages falling in the vicinity of Rajparian Wildlife Sanctuary, Daksum, Anantnag

S No.	Name Of Village.	Human Population		Cattle population				
		No. of Cholas.	Population.	Cattle	Buffalos	Horses	Sheep	Goat
1	Daksum	20	132	133	45	05	210	-
2	Deesu	658	2622	610	170	11	790	15
3	Chakoora	140	726	120	30	19	245	20
4	Goganad	48	230	22	10	14	200	06
TOTAL		866	3710	885	255	49	1445	41

4.1.3 STATES OF THE PEOPLE'S ECONOMY

Most of the villagers living on the boundary of the Rajparian Wildlife Sanctuary are marginal farmers with small land holdings. The main occupation of the people living in the surrounding of the Rajparian Wildlife Sanctuary is the livestock rearing and subsistence type of agriculture. The animal husbandry practice is one of the main source of livelihood of the locals. The animals that are reared include cows, goats and sheep. For the large number of goats and sheep rearing, many people do livestock grazing in forest areas. Though at present no proper survey has been conducted for entire zone of influence, a thorough survey on socio-economic status of villagers living in the vicinity of the Rajparian Wildlife Sanctuary is required.

4.1.4 IMPLICATIONS OF THE LAND USE AND RESOURCE DEPENDENCY FOR THE CONSERVATION OF THE PROTECTED AREA

The land holding of the villagers is very small and the quality of the livestock they are rearing is poor. The economy of the area is very dependent on the resources of the agricultural cropland and it is poor because of various reasons such as small land holding, traditional cultivation practice, poor milk cattle etc. However, in some areas scenario has changed. People have started growing orchards in place of traditional crop. In summer season, there are many locals, which are going for livestock grazing in alpine pastures of Rajparian Wildlife Sanctuary, and in spring season, many locals are involved in collection of *Guchchi Morchella esculenta* a wild variety of (mushroom) because of its high market price, which is the main dependency on Rajparian Wildlife Sanctuary.

4.1.5 FOREST / PROTECTED AREA MANAGEMENT PRACTICES AND THEIR IMPLICATIONS FOR LOCALS

The major implications of the management practices for the people of the area are listed as:

Livestock Grazing: - The villagers, who used the areas of originally notified wildlife sanctuary, were prevented from cattle grazing, hunting, fishing and collection of timber etc. Now they have to graze their cattle elsewhere or illegally in the protected areas. The upper alpine pastures of the Rajparian Wildlife Sanctuary are under huge livestock grazing pressure in spite of the area comes under wildlife sanctuary norms.

Delayed and inadequate compensation for crop damage: - Today Human – animal conflict has become one of the major concerns for the department of wildlife protection. The increase in number of conflict cases in zone of influence has become a major problem for the locals. The livestock killing and human injuries by wild animals such as Black bear and leopard, crop raiding by black bear etc,

have become common in the zone of influence. The increase in killing and damage by animals in the area leading to retaliatory killing of species such as black bear and leopard by local villagers. Many of the conflict-affected people do not report to department for compensation / ex-gratia because of less amounts and time taking process. The main problem in compensation scheme is the inadequate funds. The factor of suitable compensation and fast relief from damage by wild animals to crop, livestock and human is very important for the well-being of the protected area and some efficient mechanism should immediately be worked out which includes enhancement in the rate of compensation against crop and live-stock depredation. Faster release of funds and the need of inclusion of some crop and live-stock damage compensation scheme besides human injuries and deaths is important to reduce the negative impact of such incidences on wild animals.

4.2 THE DEVELOPMENT PROGRAMMES AND CONSERVATION ISSUES

Government agencies such as Rural Development Department, Soil and Water Conservation Department, Public Health Department, Irrigation and Flood Control Department, Social Welfare Department, Roads and buildings Department, GREF, Sheep and Animal Husbandry Department, Education etc. are implementing various development activities such as construction of roads and other infrastructures, improvement of livestock quality etc. These development practices likely influence the socio-economic condition of the locals, which are living in the zone of influence. The improvement in the socio-economic condition of the local people will definitely help in conservation of the resources of the protected area.

Summary of problems faced by people that affect the management of the protected area and the zone of influence:

- I. Shrinkage of area for cattle grazing.
- II. Abolition of traditional access to forest resources in the sanctuary.
- III. Poor condition of the local villagers results in considerable illegal activities such as timber felling and grazing in reserved forest areas in zone of influence.
- IV. Poor education and awareness, which results in lack of sensitivity among the people towards wildlife protection as observed during forest fire time. In conflict situations people use to harass the wild animals which some times comes out of the Sanctuary in human habitations.
- V. Damage because of different types of conflicts by man-wild animal interaction which includes crop damage, livestock killing and sometimes human injuries and killings.

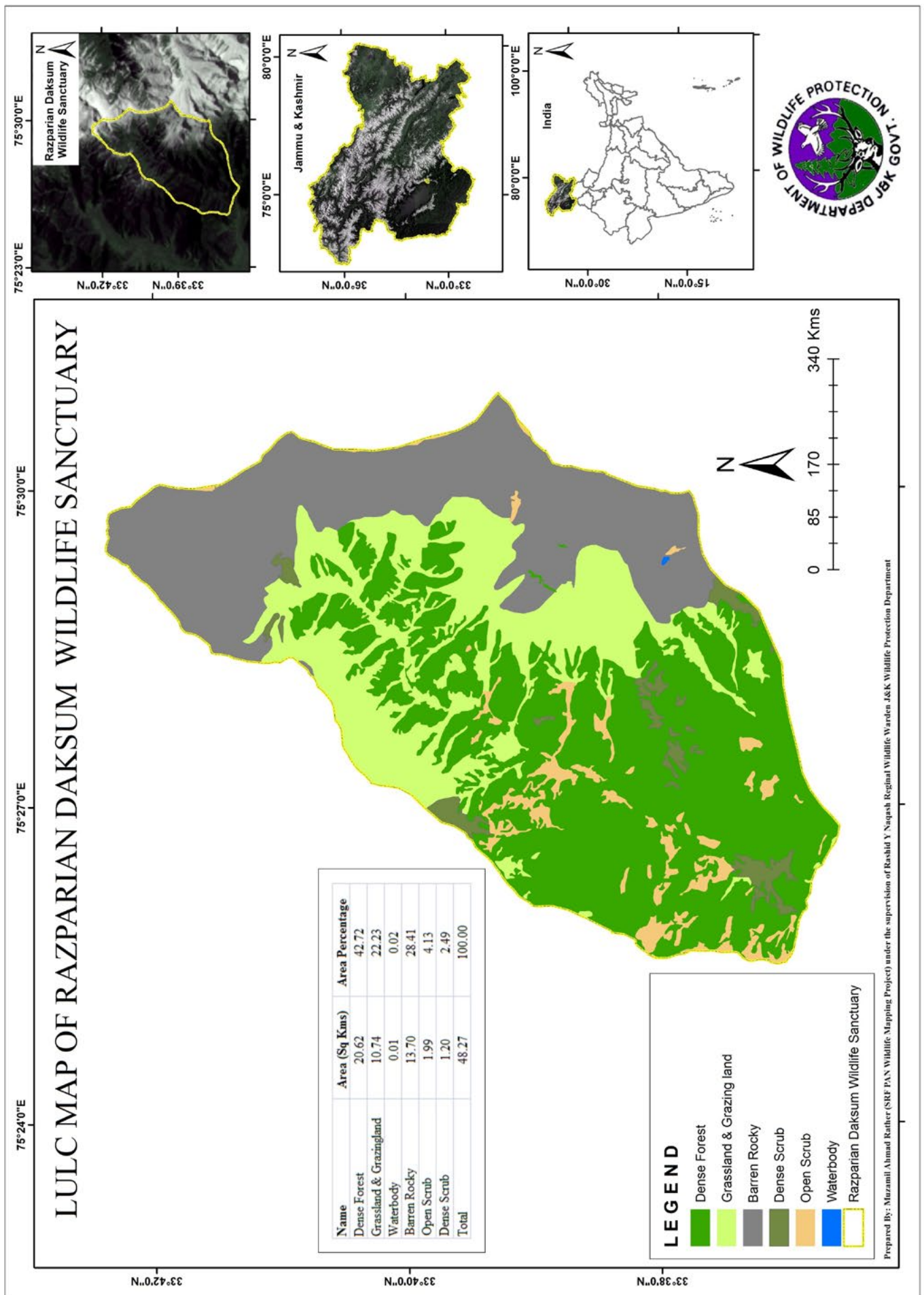


Fig 3. LULC of Rajparian Wildlife Sanctuary



PART-II

PLAN OBJECTIVES AND PROBLEMS



5.1 THE VISION

The current management plan is scientifically prepared using the guidelines given by the MOEF & CC (Wildlife wing). The current management plan aspires to conserve the greater biodiversity particularly the RET species of the Rajparian Wildlife Sanctuary as it is a blend of unique species of flora and fauna. The current management plan aspires to conserve all in a way to ensure the ecosystem services are rendered in a sustainable way.

5.2 PLAN OBJECTIVES

The following objectives have been formulated around the set of values recognized and prioritized:

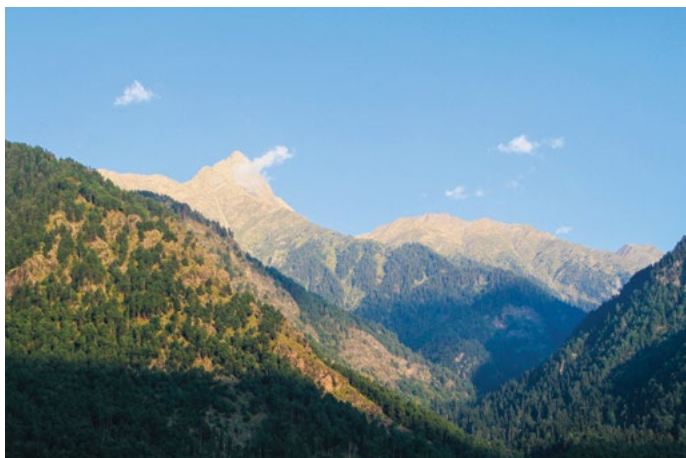
1. To formulate Conservation strategies for the RET species.
2. To Control grazing and other biotic interferences.
3. To identify key research priorities and implement programs to establish mechanism and create opportunities for enhancing management capabilities and

knowledge of wildlife science.

4. People's participation in wildlife conservation.
5. To enhance the quality of educational, recreational, and wilderness experience given to the general public.
6. Consistent with the above objectives in the zone of influence with sensitivity to cultural and economic well-being of the communities, reduce the dependency on forest based resources.
7. Development of human resources and capacity building.

5.3 PROBLEMS IN ACHIEVING THE OBJECTIVES

- Shortage of staff and inadequate infrastructure to implement management activities.
- Inadequate and late budgetary allocations.
- Anthropogenic pressures on the wildlife sanctuary.
- Low priority to Eco-development.
- Forest resource dependency.
- Lack of proper demarcation and fencing.
- Lack of co-operation between various line departments.





- Resource dependency reduction of the local dependent communities is very much capital intensive and requires a great zeal of the people's participation which at times is lacking.
- High pressure of livestock grazing.
- No eco-tourism guidelines are right now available for the Rajparian Wildlife Sanctuary.
- The high livestock population using the meadows of the sanctuary pose danger of contagious diseases in wild animals.
- Lack of quality infrastructure facilities for staff.
- Lack of proper exposure training of staff and field functionaries.

5.4 SWOT ANALYSIS

The Strengths, Weaknesses, Opportunities and Threats faced by the Rajparian Wildlife Sanctuary have been worked out as below:

Strengths

- I. Extremely rich in biodiversity due to its prime location.
- II. Presence of the RET species such as Hangul, Kashmir Musk Deer, Kashmir Grey Langur and Himalayan Brown Bear.
- III. The Rajparian Wildlife Sanctuary has comparatively lesser number of villages in its surrounding than any other protected areas and hence less anthropogenic pressures.
- IV. Excellent coniferous vegetation with good regeneration.
- V. Presence of variegated avi-faunal assemblage both endemic and seasonal migratory.

Weaknesses

- I. The Rajparian Wildlife Sanctuary being without management plan, hence is being poorly managed on modern scientific lines.
- II. Inadequate enforcement due to shortage of staff and lack of proper and trained staff.
- III. Despite harboring finest populations of Kashmir Musk Deer, Kashmir Grey Langur and being one of the important corridors for Kashmir Hangul, it is not a popular entity among common masses.
- IV. Lack of wildlife research and its resultant information for the resultant scientific management of the wildlife sanctuary.

Opportunities

- I. Develop and conserve Rajparian Wildlife Sanctuary not only as hub of RET species but an important corridor for the Hangul for its movement in its relic habitat.
- II. Ample scope for modern scientific research to convert weakness to the strengths.
- III. Only protected area to have an excellent Kashmir Musk Deer population.

Threats

- I. Too much dependency of local communities on the protected area for food, water and grazing and collection of NTFs.
- II. Human – wildlife conflict which on one hand results in crop damage, injuries and death of the people while on other hand it results in retaliatory killing of the animals in the conflict zone.
- III. Grazing pressure in upper reaches particularly during summer season.
- IV. Poaching and other illegal activities.

THE STRATEGIES

The Rajparian Wildlife Sanctuary harbors a great floral and faunal diversity, hence maintaining the habitat, ecosystem characteristics and the species assemblage to maintain the sustainable ecosystem services is vital. The management actions aiming at the protection of the wildlife from both the man – made and natural ecosystem stressors will be undertaken during the plan period.

6.1 BOUNDARIES

The boundaries of the Rajparian Wildlife Sanctuary are already discussed in the Chapter 2 and the original boundaries of the wildlife sanctuary notified is given in the (Annexure vi)

6.1.1 ECOLOGICAL BOUNDARIES

The wildlife sanctuary is bounded almost on all sides by the territorial forest areas. Some steep mountain peaks such as Tipo top, Kangraz and Daksum bound the Rajparian Wildlife Sanctuary.

- 1. Boundary Delineation/Demarcation:** -The boundary delineation is the grave issue the management of the Rajparian Wildlife Sanctuary is currently facing which need to be resolved at the earliest possible. The boundaries of the wildlife sanctuary will be carefully checked and demarked using the latest technology of GPS and GIS. The boundary issues are to be mutually sorted out between the departments such as Forest, Wildlife protection, Revenue, Tourism (KDA). The properly demarcated area will enable the frontline staff of the department to check the magnitude of management practices beneficial for the survival of wildlife species and their dilapidated habitat. Properly demarcated area will be helpful to eradicate the menace of illegal encroachment. Under this dispense, the boundary demarcation will be carried out by erecting concrete cement pillars depicting name, date of demarcation, demarcation code, department emblem etc. and by raising chain link mesh along the actual demarcated area of the protected areas, so that impact in terms of biotic interference and menace of Grazing will be minimized and besides eradication of illegal encroachment will become easier.
- 2. Maintenance of the Boundaries:** -Name of block, compartment number and number of pillars with Geo-tagging should be inscribed on the pillar and record to be maintained in the office. Wildlife warden,

Range officer and the concerned Block officer should regularly check these boundaries and boundary pillars during their routine inspection of the area.

- 3. Inter-departmental coordination:** - Liaison should be established with the Revenue authorities, forest department and tourism department for proper correction of records relevant to lands allotted to the wildlife department. Liaison with Revenue department will be helpful in clarifying the confusions on the protected area boundaries.

6.2 ZONE PLANS

The Rajparian Wildlife Sanctuary is having steep and undulating topography with slope and aspect changing every movement hence all the areas cannot be catered uniformly and hence is necessary to divide the protected area into zones.

Core zone

The core or conservation zone would cover the entire sanctuary area except the tourism zone. Core zone, should be free from human disturbances and external influences. In the core zone, natural ecological process shall be allowed to continue and in this zone, minimal management interventions will be introduced.

Eco-development Zone

The zone would be outside the boundary of the sanctuary within 5 km of the sanctuary boundary.

Eco-tourism Zone

The area from the entrance gate until Chach Kan can set as the Eco-tourism Zone. The tourism in this area can be regulated in such a way that there is no adverse effect on the wild flora and fauna of the sanctuary.

6.3 THEME PLANS

The management interventions, which are applicable to the whole area of the Rajparian Wildlife Sanctuary irrespective of the zones, are discussed asunder;

1. Habitat management.
2. Control of grazing and other biotic pressures.

3. Control of poaching.
4. Fire management.
5. Watershed development and soil erosion control.
6. Man – animal co – existence.
7. Rescue, Rehabilitation and animal health monitoring.
8. Capacity development and Human resource development.
9. Development of infrastructure and capacity building.

6.3.1 THEME PLAN FOR HABITAT MANAGEMENT

The wildlife habitat is always under constant threat due to various pressures both natural and manmade. Reclamation of wildlife protected areas, illegal harvesting of medicinal plants, illegal tree felling, weed infestation particularly invasive, over grazing, diversion of water channels for agricultural practices, fire hazards are some exceptions, whereas natural vagaries in terms of floods, natural fires, soil erosion etc. which engulf large chunk of wildlife habitat and take heavy toll of wild animals too. The mitigation measures are to be ensured to provide a congenial habitat to these wild denizens where they can thrive in tranquility for their survival. Priority has to be given to such schemes, which will protect their habitat from further degradation and will provide enumerable benefits like forage, cover, water and protection from poachers etc. As a part of habitat restoration, following prescriptions are proposed during the plan period:-

- Fencing of the boundaries to avoid the apprehensions of encroachment and to resist the movement of the wild animals within the limits of protected area to avoid the Human – wildlife conflict. The type of fencing should be site specific.
- Plantation particularly of the fruit bearing trees in areas devoid of such plantations or having less regeneration rate.
- During pinch periods in early winter, animals invade crop-fields and damage orchard trees, beehive shelves or inflict heavy injuries to the farmers and their live-stock and fall easy victims to human wrath. During the plan period, it is proposed to develop the heavily denuded areas by way of fruit bearing plants, develop pasture nurseries and to adopt silvi-pasture practices in wastelands, so that wild animal movement can be restricted within the confines of the protected areas.
- Artificial waterholes to be constructed in areas with little or no accessibility of animal to the natural water sources.
- Heavily eroded and degraded alpine pastures need to be protected on temporary basis in order to allow recovery and facilitate regeneration of native grasses, herbs and shrubs.
- Eradication of the weeds and unpalatable grasses on phased basis such as *Solenanthus circinatus*, *Stipa siberica*, *Euphorbia spp.*, *Isodon plectranthus* and other such species.

- Weather calamities perish many wild species or sometimes snowfall take heavy toll of wild animals. Under such circumstances, shelter sheds are very useful to provide relief to these wild animals. Sometimes field functionaries' face lot of difficulties due to inaccessible terrain, inside protected areas. Need is to create inspection paths enabling the field staff to perform their field duties, field biologists to conduct research work in inaccessible areas of sanctuary and to help wild animal free range movement inside protected area.

6.3.2 THEME PLAN FOR CONTROL OF GRAZING AND OTHER BIOTIC PRESSURES



The Grazing by migratory livestock's in upper pasture areas of the Rajparian Wildlife Sanctuary is a challenge for the sanctuary management. During summer season large number of nomadic livestock grazers sneak in upper areas of the wildlife sanctuary for grazing which has become a serious concern for management. Besides, the Rajparian Wildlife Sanctuary is being used as the gazing route and huge number of the livestock sneak through the wildlife sanctuary to approach other grazing grounds of District Kishtiwari (Jammu) as the Northern boundary of sanctuary is towards the District, which causes enormous damage to the wild habitat. Grazing of domestic livestock should be prevented by effective enforcement by the staff. To control the menace of the grazing the following prescription is proposed:-

- In most vulnerable areas, cattle proof fence is to be raised.
- A proper survey of livestock population in the zone of influence should be initiated to formulate a scheme for immunization of livestock.
- As the menace of illegal grazing is more persistent during the summer season, grazing camps will be set-up particularly in the upper reaches.
- Providing proper incentives, medicines, flashlights and proper gears to the staff performing duties at anti grazing camps.
- Transient Bakarwals route through the wildlife sanctuary should be diverted.

- Long term plans to provide alternate grazing areas to bonafide herders should be explored/developed.
- Mapping of the grazing routes leading to commonly occupied areas for grazing, it will immensely help in planning of setting up appropriate anti - gazing camps.
- Most important corridors of Hangul and abode of Kashmiri Musk Deer during summer season shall be confined for any kind of grazing.

6.3.3 THEME PLAN FOR CONTROL OF POACHING



- Anti- poaching camps will be setup in critical locations especially in the core area for enhanced protection.
- The Range officer will divide areas into patrolling units and communicate the perambulation schedule to the staff officer on monthly basis for implementation under intimation of wildlife warden office.
- Camping for 4-5 day duration will be regularly carried out in the core and buffer areas. At least 3 to 4 camps will be arranged in these areas each month to ensure proper protection.
- All existing patrolling paths will be cleared once a year at least to provide safe movement to field staff for patrolling. Proper mapping of these paths will be done and if required new alignment of patrolling paths for effective patrolling will be done.
- Providing all basic logistic to field staff such as wireless equipment, if possible, flashlights and cells, GPS, binoculars, camera summer and winter gears etc.
- The Wildlife Warden will conduct frequent surprise checks.
- The importance and value of wild animals and their wildlife heritage need proper dissemination through electronic and print media, so that the poaching incidents are minimized and a hormonal attitude is developed amongst general masses towards wildlife. Anti-poaching activities and Anti-grazing Camps needed to be organized in adjacent villages of protected area
- The Wildlife Warden will take appropriate measures to ensure that every person residing in or within 10 km of the sanctuary and holding a license granted under the Arms Act, 1959 should get the arms registered with the Chief Wildlife Warden or the authorized person.
- Surprise raids will be conducted in Gujjar and Bak-erwal Kothas(temporary shelters) in upper areas of sanctuary during summers and in adjacent Gujjar localities and suspected houses adjacent to it during

heavy snowfall to seize illegal weapons and arrest the poachers.

Use of Modern Technology

Protected Areas are repositories of biodiversity and the aim is to safeguard this natural heritage for long term. Despite their critical role in conservation, they face shortage of resources in terms of labor, infrastructure and equipment to fully achieve the aim, especially with the increasing anthropogenic interference and unforeseen circumstances. Thus, there is a demand for cost-effective, versatile and practical initiatives to achieve conservation and management goals by using a balance of traditional techniques, advanced technologies and innovative methods. Poaching has also been identified as one of the threats. Therefore, the regular monitoring and surveillance is an utmost need and drones can play an important role.

The emerging and advanced technologies can play a huge role in research and management of wildlife. Wildlife biologists manage to improve data collection and have effective monitoring and surveillance, especially when the technologies are cost effective and are being increasingly adopted. Remotely piloted aircraft (RPA; commonly known as “**Drones**” unmanned aerial systems or unmanned aerial vehicles) have seen a rapid uptake by wildlife managers and scientists for novel data, monitoring and surveillance. Drones provide a comparatively low risk-free and low-cost manner to monitor natural at high spatio-temporal resolution with less time and systematically. Drones can collect extremely fine spatial and temporal resolution data at the discretion of the user. Therefore, drones are being used for data collection in an increasingly diverse suite of ecological applications, including transect counts of African elephants, monitoring for poaching activities, detecting reptile and arboreal mammal hides. The ability to collect data with higher accuracy, higher precision and less bias than the existing approach confirms that drones are a scientifically rigorous data collection tool for wildlife population monitoring. Furthermore, as RPA platforms, sensors and computer vision techniques continue to develop, it is likely that the accuracy and cost effectiveness of RPA based approaches will also continue to improve. These advantages have recently made drones to be used in wildlife research and management.

6.3.4 THEME PLAN FOR FIRE MANAGEMENT

The Forest fire is major destructive factor that challenges the protection of the ecosystem of the Rajparian Wildlife Sanctuary. Therefore, fire management has to be given central focus in order to manage and mitigate its effects. The following are general Strategies for implementation of fire protection measures in the Rajparian Wildlife Sanctuary during the plan period:-

- **Fire Lines** -The fire lines will be created during the plan period in all fire prone areas. However, the following fire lines will be given priority during the plan period to mitigate the adverse effects of the fire.



Table 6. List of proposed fire lines in the Rajparian wildlife sanctuary

Sl. No.	Name of the Fire line	Length
	Sobapathri to Zampathri	3 Kms
	HabalNai to Habalpathri	4Kms
	Sobapathri to Chandanwari top	1.5Kms
	Pathrikhan to Zampathri	2Kms
	Raznad to Rangmall	3Kms

- The fire protection camps will be used for the camping of firefighting squad. In addition, temporary structures will be set up in all fire vulnerable areas to detect and

prevent the spread of fire from the human habitation around the wildlife sanctuary.

- The fire watchtowers shall be setup in the fire prone areas and will be maintained periodically.
- Firefighting squads will be engaged throughout the season for efficient fire protection activities.
- The members of the participatory fire management will be from the fringe areas and will be involved in participatory fire management.
- Awareness campaigns are essential for preventing fire. Wildlife Warden will arrange awareness and training for the staff, local dependents before the fire season every year. Awareness campaigns may be arranged for fringe area People, schools, colleges, and people's representatives on the impact of fires on forests and wildlife. This may be done by mass involvement of people in procession, talks, information display board hoardings, banners, street plays etc.
- Training programmes for staff, and other members of the community involved in fire protection shall be organized and liasioning in this regard shall be developed with department of fire and Emergency.
- The equipments like fire proof shoes, fire resistant shoes, water pumps, fire beaters, jig saws, chain saws, reeks, axes, fire resistant suit etc. may be procured and made available to the fire management groups.
- Incidents of fire shall be documented and shall be reported promptly to Regional Wildlife Warden and Chief Wildlife Warden. Controlled pre-burning areas will be mapped and GPS documented to assess their impact and to streamline future activities.

6.3.5 THEME PLAN FOR DEVELOPMENT OF WATERSHED AND CONTROL OF SOIL EROSION



Soil erosion in Rajparian Wildlife Sanctuary is mainly attributed to cloud busts, heavy rainfall in upper elevations of Rajparian Wildlife Sanctuary. Erosion is not a regular process but constant monitoring with the use of multi-satellite data to ascertain the fluvial dynamics and trend of erosion is required.

The watershed unit holds now key position in the development and has been described as **"Unit of Development"**. The following procedures will be adopted in plan period for the watershed management and development:-

- Construction of check dams – the check dams will be constructed using the locally available materials in the high priority areas.
- DRSM works should be used to create bunds in order to prevent the divergence of water into high vegetation zones of the Rajparian Wildlife Sanctuary.
- Other works to conserve water in the Sanctuary will be taken guard for the welfare of the wild animals.

6.3.6 MAN ANIMAL CO – EXISTENCE

The depredation on crop and human assets by wild herbivores and occasional cattle lifting by large predators cause considerable hardship to the poor people who reside in the fringe of the Rajparian Wildlife Sanctuary. The livelihood of majority of fringe dwellers mainly depend upon agriculture and cattle rearing. When their crops are destroyed or wild animals kill livestock, their economy is shattered. Today Human – wildlife conflict management has become a challenging task for the managers of wildlife sanctuary. The number of conflict cases have increased to such an extent that even patrolling in these areas have become difficult because of less number of employees in department. Increase in Human – wildlife conflict cases have resulted in antagonism towards wildlife and have become another management problem for the authorities of the wildlife sanctuary.

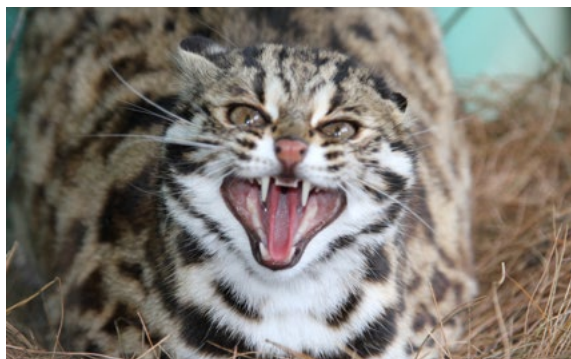
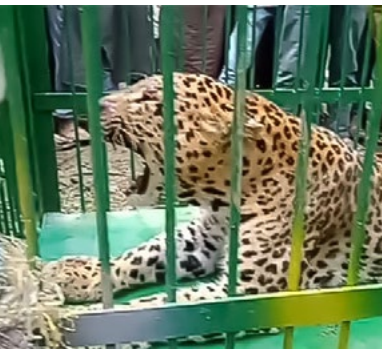
The following strategies are proposed during the plan period to mitigate the increasing Human – wildlife conflict cases:-

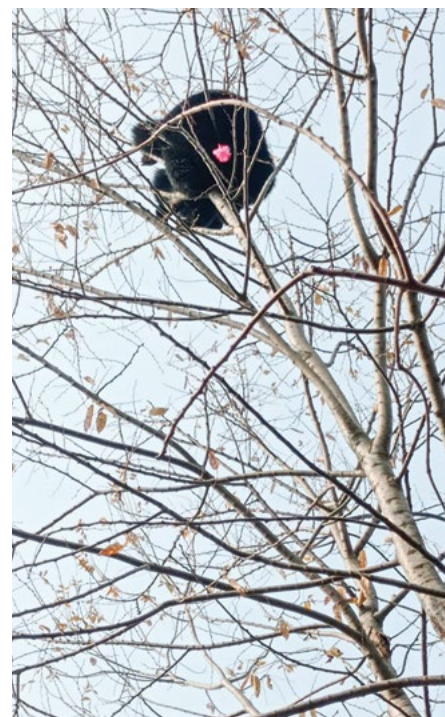
- Injury or death of people due to attack by wild animals should be immediately attended and compensation/ex-gratia is to be provided soon after the incident.
- The damage to the crop, livestock should be adequately compensated for which a proposal of compensation on crop or live-stock damage is to be regulated by the Government.
- Formation of crop protection committees in problematic villages and provision to provide some logistics such as firecrackers, solar lights, torch lights etc. to such committees.

- A flying squad in each range will be formed entirely to manage crop damage by wild animals during fruit orchard harvesting. The squad will patrol the vulnerable locations from evening until morning and will be equipped with firearms, firecrackers and other tools necessary to drive the wild animals from human habitations and crop fields to Sanctuary. The vehicle for flying squad will be kept ready in good condition with enough POL for the above-mentioned specific period.
- The villagers will be encouraged to go for animal proof fencing all along the crop fields and village.
- A survey will be conducted for assessing the feasibility of taking up fencing in vulnerable locations as means to reduce Human – wildlife conflict.
- Electric fencing is proposed on the boundaries of the wildlife sanctuary in areas, which are close to human habitations.
- It is also proposed to take up eco-development works in the surrounding areas of the wildlife sanctuary.
- Veterinary Health Camps in the adjacent pockets of the protected areas will be organized by involving all people having adjacent to sanctuary and from veterinary and animal husbandry department to check the diseased animals, vaccinate them properly and inoculation of valuable medicine to get rid both the animal communities from sporadic diseases. Mobile camps will also be organized inside the protected area, to vaccinate and treat the livestock accompanying the tribal people.
- There is an urgent need to set up a separate control room at the Rajparian Wildlife Sanctuary as nearest rescue control room is located at 50 Km and is unable to cater the need of this large area.
- Sufficient budgetary allocations shall be provided for
 - a. Maintenance of old trap cages and procurement of new ones.
 - b. For maintenance of vehicles and their POL.
 - c. For other conflict handling expenditures.
 - d. For procurement of tranquilizing guns, drugs and other accessories.
 - e. For essential medical kits and gears for dealing staff

RESCUE AND REHABILITATION OPERATIONS







6.3.7 RESCUE, REHABILITATION AND ANIMAL HEALTH MONITORING

- All protected areas of the valley exist in close proximity with the village hutments. Natural calamities like heavy snowfall, incessant rains, floods, heavy biotic interference or sometime scarcity of food etc. force the wild animals to approach the crop fields and invade human settlement. By doing so animals render heavy damage to their crop fields, orchards and livestock and inflict heavy injuries to the human beings too, who sometimes succumb due to injuries. In retaliation, the angry mobs also kill many animals and inflict heavy injuries to them. These animals are rescued by the department and rehabilitated accordingly. The animals that usually come under this category are Black Bears, Brown bears, Leopards, their cubs, Kashmiri Stag (Hangul), Porcupine, Musk Deer, Monkeys, and Langurs.
- The department had launched a program to establish

Rescue and Rehabilitation Centers in each wildlife-protected area so that animals will be treated by local veterinarians, field staff and shall accordingly be released in their respective protected areas. These animals are to be rescued from far off areas and that too in trauma conditions, their easy transportation without causing further concussions, is possible if a rescue van is available with the department. Priority has also been given to purchase a rescue van including its fuel emoluments.

- It becomes very difficult for field staff to trap any injured animal manually without tools/devices as animals sometimes render heavy casualties to the field staff deployed for the job. To avert such incidents and without causing more distress to the wild animals, proper trapping/tranquilizing tools are essential in operations.

- Animals rescued need rearing, carriage, treatment and engagement of additional, skilled Animal Keepers becomes essential constituent of Rescue and Rehabilitation Program. These rescued animals are sometimes rescued from far off areas and outside protected area need private transportation. Expenditure on this account has been emphasized in the action plan. Proper provision for vaccination, medicine, feed and due publicity regarding vaccination camps, animal handling, precautionary measures needed to be taken and to be displayed through print and electronic media.
- It is proposed to procure a four-wheel vehicle for efficient management of Human – wildlife conflict issues.

6.3.8 CAPACITY DEVELOPMENT AND HUMAN RESOURCE DEVELOPMENT

The following activities regarding the capacity building and human resource development activities are planned in the current plan period:-

- Training shall be given to patrolling staff in unarmed combat, survival skills, usage of tranquillizing guns, first aid, swimming, driving etc. These trainings can be imparted in collaboration with different departments including police.
- Training shall be given in the preparation of offence reports. Selected staff will be trained as 'handlers' as part of intelligence gathering.
- Police should be approached for giving short-term trainings on intelligence gathering at regular intervals.
- Exposure training to staff working in the sanctuary in identification of plants and animals will be periodically provided as part of building their capacity.
- Local persons from the communities of the fringe areas with aptitude will be identified and trained in basics of wildlife crime detection.
- It is proposed to procure field equipment such as Tents, Compass, GPS, Binoculars, Range finder, Digital camera, Rain Gauge, Thermometer, Hygrometer, Camera trap, field kits, etc. for all camping stations manned. In addition, the staff will be provided with field uniform once a year during the plan period.
- Field staff will be deputed in Wildlife Crime Control Bureau, New Delhi or its officials will be invited to train and expertise them in Wildlife Crimes.

6.3.9 DEVELOPMENT OF INFRASTRUCTURE AND COMMUNICATION

To provide adequate protection to the wildlife and manage the wildlife sanctuary in the best possible way, extensive infrastructure and communication network are to be maintained in a best possible way. The Rajparian Wildlife Sanctuary is maintained under the administrative head of the Wildlife Warden South Division. The Major departmental buildings inside the Rajparian Wildlife Sanctuary are as follows:-

Sl. No.	Name of the Asset	Number
	Old rest house	01

	Inspection hut	01
	Staff quarter (One each in wood, tin and Concrete)	03
	Watch tower cum staff quarter	01
	View points	02

Prescriptions

- All the office buildings will be repaired periodically and as per requirement.
- Almost all the staff quarters are in bad shape and are in need of major repairing, few are non-functional and need to be newly constructed.
- Permanent and semi-permanent camps will be set up and will be annually repaired after the end of winter season.
- It is proposed to uplift and renovate the entrance gate of Rajparian Wildlife Sanctuary.
- Most of the existing buildings are in bad shape and will be renovated and reconstructed in the plan period. Besides few, new more buildings as mentioned below are suggested for this plan period

Staff Quarter ----- 02

BO Quarter ----01

The details of the all building existing within the Rajparian Wildlife Sanctuary is given in the (Annexure VII)

ROADS/ BRIDGES/ CULVERTS

The Rajparian Wildlife Sanctuary has a small network of roads inside wildlife sanctuary, which require renovation, and there is a need to construct some new roads during the plan period. These roads are to be repaired annually after the winter season to make them motor able for emergency services. Besides there are several wooden, iron bridges and culverts on these roads. These are also to be periodically repaired and some of these are to be reconstructed.

COMMUNICATION

Vehicle

Currently there are no vehicles in use at the Rajparian Wildlife Sanctuary. It is proposed during the plan period to procure a four-wheeled jeep for effective management of the wildlife sanctuary.

Wireless communication

There is no wireless network system at present used in the Rajparian Wildlife Sanctuary for communication and largely dependent on mobile networks which sometimes do not have coverage in all areas of the wildlife sanctuary. There is an immediate need of wireless network in Rajparian Wildlife Sanctuary for better communication.

Though the prescriptions for development of infrastructure and communication are given above, a detailed plan involving proper survey and alignment of roads, present status of buildings, new requirement and their locations, estimates etc. will be prepared during the first year of the plan.

ECO – TOURISM INTERPRETATION AND CONSERVATION EDUCATION



7.1 General

The protected areas such as the wildlife sanctuaries or the National parks now-a-days have become part of tourism. Now wildlife works as a magnet for the tourists on one hand and on the other hand, it creates positive impacts such as to raise the awareness among the people on stern role and overt function in the biosphere. The Rajparian Wildlife Sanctuary has ample potential to be one of the premier tourist sites in the Kashmir valley. Its breathtaking scenery right from the lush green meadows to the crisping birds, from the gushing streams to the luxuriant vegetation of the Himalayan yew, it is simply amazing. However, the

Rajparian Wildlife Sanctuary has remain hidden from the tourist sites owing to the negligence and lack of any kind of tourism and eco – tourism plan. The current management plan will have a central focus on the tourism and Eco – tourism plans and will lay foundation to these neglected spheres of the management.

7.2 Strategies for environmental conservation awareness

1. Give priority to the Educational Institutions and organizations around the villages of Rajparian Wildlife Sanctuary in awareness programmes.



2. Conduct nature awareness camps for schools, colleges, nature clubs, NGOs and other interested groups.
3. Device and conduct awareness programmes for target groups such as tour operator, guides, and taxi drivers, to create awareness on nature conservation and to help in visitor management.
4. Upgrade the existing facilities at the Rajparian Wildlife Sanctuary regarding the conservation and environmental education
5. Develop education and awareness materials like leaflets, brochures, pamphlets, posters etc. for various target groups
6. Organize extension programmes in the fringe areas of the Rajparian Wildlife Sanctuary-VSS, NGOs.
7. Impart training for the staff engaged in awareness programmes.
8. Make available the service of Wildlife Warden for visitor management and conservation education.
9. Engage trained resource persons to help information, dissemination and visitor management.
10. Make available facilities like LCDs, computers, sound systems etc. and maintenance of existing facilities.
11. Conduct study tour for staff for other PA's.
12. Develop information Centre, Nature Education Centre, Orientation Centre, Interpretation Centre, Conference hall, library, toilet block, landscaping, parking, etc. in a centralized location.

7.3 Facilitating Nature-based regulated tourism- (Eco-tourism)

As part of the regulated eco-tourism, the following activities shall be taken up during the plan period.

1. To prepare and implement a supplementary visitor management plan for tourism and awareness Zone and other eco-tourism programmes.



2. Prepare site specific micro plans for ecotourism packages for the buffer zone.
3. Monitor the implementation and revise the supplementary visitor management plan once in 2 years, if needed.
4. Develop and implement interpretation packages as part of visitor management plan for all ecotourism programmes.
5. Conduct periodic impact assessment of tourism areas once in 5 years with the help of scientific community.
6. Develop and implement system for collection of feedback from visitors to the wildlife sanctuary wherein besides the field staff NGO members and volunteers can be utilized.
7. Create and maintain basic amenities to visitors in the tourism areas for ecotourism programmes based on approved micro plan or supplementary visitor management plan.
8. Explore the possibility of imposing fine for littering, plucking of flowers, teasing of animals etc. in the Sanctuary based on wildlife Protection Act 1972
9. Capacity building and training to staff on human behavior, identification of flora and fauna, visitor management, interpretation of the protected area values etc.
10. Conduct carrying capacity study and regulate the visitors to the tourism and awareness zone. Visitor permissions shall be issued strictly in accordance with carrying capacity worked out by the schemes of this management plan.
11. Conduct review/ seminar / workshop annually on tourism programmes and publish the annual report.
12. Develop theme based information displays in the tourism and awareness zone.
13. Make available more information to the visitors on the RET species and other endangered flora and fauna by

making available literatures and publications by establishing a museum in the tourism zone.

14. Action plan for existing trekking routes shall be put in action and identification of new ones along with the camping sites should be done.

7.4 New ecotourism proposals

Protection and education oriented limited trekking, trekking and camping programmes for school and college students.

7.5 Problems related to Tourism:

A few identified problems pertaining to the Tourism inside Sanctuary are:

1. Lack of comprehensive tourism plan.
2. Lack of proper maintenance of tourism infrastructures.
3. Lack of facilities of Interpretation center to educate visitors.
4. Inadequate staff deployed for controlling and regulating tourism in the wildlife sanctuary.

7.6 Strategies

Identification of the new Eco - Tourism zone

The tourism zone in the Rajparian Wildlife Sanctuary is in the form of a zone from the Main entrance gate to the Chach Kan. Another track from the main entrance to the Kewan nallah may also be used as tourism area. For the future development of the tourism area, it is proposed to plan, develop, and add some more tracks for tourism purpose inside the Rajparian Wildlife Sanctuary and areas on the fringe of the wildlife sanctuary.

ECO – DEVELOPMENT



The Rajparian Wildlife Sanctuary is having a vast zone of influence. The livelihood of the most of the people living around the wildlife sanctuary is cattle rearing along with subsistence agriculture with very small land holdings. The socio-economic status of the majority of the people is very weak. The data furnished by the Block Development officer Larnoo reveal that 98.23 percent of the people living in the fringe areas of the Rajparian Wildlife Sanctuary are schedule castes and schedule tribes. As the existing wildlife laws do not allow traditional access to forest based resources in the wildlife sanctuary, people have to explore other areas for some activities like cattle grazing, collection of wood, fishing etc. besides, sometimes the wild animals comes out of the wildlife sanctuary and cause the damage to life and property of the people resulting in Human-wildlife conflict. They should be provided with more opportunities in visitor management and ecotourism to generate employment opportunities. Therefore, to uplift the socio-economic condition of the people of the fringe villages and to maintain a good relation between department of wildlife protection and the villagers, a broad based eco-development program in the buffer zone should be adopted. The possibility for the formation of Eco development committees, which will work in association with the department, panchayats and NGOs with good credentials in these areas are to be explored during the plan period. All the people surrounding the

wildlife sanctuary depend on streams originating from the wildlife sanctuary for their irrigation and drinking water and therefore any type of soil moisture conservation works shall be recommended in consultation with fringe population. The Eco development schemes and need of the people is to be studied with the help of experts. Help of Government agencies like Tribal Department, Agriculture Department, Agricultural University, Education and research institutions and reputed NGOs with good credentials are to be taken on board in order to fulfill the eco-developmental needs and thus achieving Sanctuary management objectives.

8.1 OBJECTIVES

- To develop effective and extensive support for Eco-development.
- To improve capacity of protected area management to conserve resources of the Sanctuary and to achieve local co-operation for achieving Sanctuary management objectives.
- To create a congenial relation between the managers of the wildlife sanctuary and the people, this will act as an effective barrier against attempt of poachers and miscreants.

8.2 Issues in Achieving Objectives

- Alternative livelihood strategies.
- Dependence of villagers on forest resources.
- Improvement of living condition.
- Mitigating negative impact arising out of Human – wildlife conflict.
- Community development work.
- Non-consumptive use of protected area through eco-tourism.

8.3 Strategies

To strengthen the People-PA interface, the following strategies and activities are proposed:

- Improve people-PA relationship through eco development.
- Facilitate Forest Rights Settlement including community rights.
- Facilitate certification and organic farming in the fringe area.
- Utilize all available funds for Eco development.
- Develop and improve inter wing and inter department co-operation.
- Vaccination of the cattle in fringe areas.
- Training of young and enthusiastic people from these fringe communities as eco guides.

8.4 Activities

- Identify the eco-development needs through micro planning and studies.
- Strengthen the Eco-development activities with the help of EDCs.
- Make available sustainable livelihood to people in the fringe areas by exploring available opportunities in visitor management and ecotourism programmes.
- Make available educational, social and medical assistance in fringe areas by facilitating coordination between people, NGOs and line departments.
- Assist the tribal people in enhancing the income from agriculture and trout fisheries by facilitating workshops involving relevant departments.
- Encourage the idea of crop insurance.
- Implementation of Eco development programmes in

fringe areas in relevant groups and NGOs.

- Explore all fund possibilities from various schemes for holistic eco-development.
- Ensure the participation of protected area management in planning and implementation of projects by the line departments in the eco development zone.

8.5 Strategies for specific issues

8.5.1 Firewood collection

The fire wood collection is one of the main issues pertaining to the management of the Rajparian Wildlife Sanctuary. Since firewood collection always remains a challenge to deal with due to dependence of fringe communities on resources of protected areas, therefore this too is dealt with as a part of eco-development initiatives. Therefore, following strategies shall be adopted:

- Study extent and impact of firewood collection. Regular surveys shall be conducted to study extent and impact of firewood collection and hence comparative analysis should be generated in order to evaluate if there is any change in the pattern from the current situation
- Encourage fuel wood cultivation of indigenous species.
- Providing energy saving devices, supply of gas connection on subsidized rate by the department and explore the possibility of alternate fuel sources.

8.5.2 NTFP collection

The NTFP collection offers a great deal of challenge to the management of the Rajparian Wildlife Sanctuary as locals heavily depend up on the NTFP collection in the protected area. Persistent monitoring shall be maintained and as major strategy, regeneration of NTFP and medicinal plant species shall be encouraged among fringe communities in their property lands, in line with recommendations laid down by Medicinal Plant Board.

8.6 Strategies for alternate income to dependent community

- Explore the potential of ecotourism programmes to improve the employment generation for the local dependent communities
- Explore the possibility of enhancing opportunities in visitor management activities to create more employment for the local dependents.
- Concept of home stay should be introduced.

RESEARCH, MONITORING AND TRAINING

India is one among the twelve-mega biodiversity countries that has a rich fauna and flora. This diversity is because of the different bio geographical zones found in India. There are ten bio geographical zones found in India. Out of which two (Trans- Himalayan and Himalayan) lies in the Union Territory of Jammu and Kashmir. These two bio geographical zones have high endemism in terms of fauna and flora. The conservation of biodiversity needs proper action plans. The Ministry of Environment, Forest and Climate Change unveiled the National Wildlife Action Plan (2017-2031) for the conservation of biological diversity through enhancing the protected area networks. It accords special emphasis to rehabilitation of threatened species of wildlife while conserving their habitats, which include inland, aquatic, coastal and marine eco-systems. For the better conservation of any protected area, the wildlife management has to be well equipped with the all kind of scientific data. The wildlife managers must have the exact data on wildlife resources, dependence of local people on forest resources, ongoing ecological process, climate change and its impact, nature of threats and opportunities. These data help in the proper decision making and adopting effective strategies to deal with the various management challenges.

The following research, monitoring and training programmes are proposed during the plan period:

- Collection of baseline data.
- Enhancement of bench mark knowledge.
- Effective decision making.
- Enhance integrity of protected area PA eco-system.
- Enhance benefit.
- Reducing overall management cost.
- Finding solutions to threats.
- Enhance public awareness and community participation in conservation.

Identification of Research thrust areas and Research topics.

ECOLOGY (INCLUDING HABITAT)

- I. Biodiversity of the Rajparian Wildlife Sanctuary.
- II. Vegetation structure and composition in the Rajparian Wildlife Sanctuary.
- III. Habitat ecology of Kashmir Musk Deer, Hangul, Himalayan Brown Bear Himalayan Grey langur and Common leopard.
- IV. Seasonal habitat suitability for Hangul and other ungulates.
- V. Population ecology (Asiatic black bear, Common leopard).
- VI. Population status of other ungulates (Musk deer, Serow etc.).
- VII. Avian diversity of the Rajparian Wildlife Sanctuary.

ETHOLOGY

- I. Social and reproductive behavior of different species e.g. hangul, Musk Deer, Common leopard, Asiatic black bear, Himalayan Brown Bear and Himalayan Grey langur.
- II. Home range and Movement patterns of Hangul as Rajparian is an important corridor of the Hangul.
- III. Study on reptiles in the Rajparian Wildlife Sanctuary.
- IV. Study on the butterflies of Rajparian Wildlife Sanctuary
- V. Inter-specific relationship between Hangul, common leopard, Asiatic black bear, Himalayan Grey langur, and rhesus macaque.
- VI. Detailed study of the avian diversity of the Rajparian Wildlife Sanctuary
- VII. Study of Entomology of Rajparian Wildlife Sanctuary.

WILDLIFE POPULATION SURVEYS

The base line data of a particular animal in a particular wildlife habitat is obtained only after cohesive census and survey operations are carried out in and outside protective areas. The census figures of most important and highly endangered wild animals like, Hangul, Kashmir Musk Deer, Black Bear, Brown Bear, Leopards etc. would be obtained only after conducting frequent census and survey opera-

tions in and outside protected areas. These census figures will reveal population fluctuations and precautionary measures will accordingly be implemented to safeguard their survival. Some other areas having potential to harbor wildlife will also be surveyed and included in the wildlife protected area network.

WILDLIFE POPULATION DISEASES

There are no baseline data for the health management of the wildlife in Rajparian Wildlife Sanctuary. The research studies dealing with wildlife diseases in the Rajparian Wildlife Sanctuary are required. Moreover, regular monitoring of health is essential to find out the early detection of the diseases. A veterinarian should be well trained to tranquilize the animals for the regular health checkup. Database on various wildlife diseases of different species should be maintained. The Study on transmission of livestock diseases to important wildlife species and wildlife diseases to livestock. Will also be done.

Socio ECONOMIC SURVEY

The socio-economic studies of the local forest dwellers is extremely important to understand the livelihood of the local dependent communities on the forest resources extracted from the Rajparian wildlife sanctuary and surrounding protected areas. This type of study will help the management in changing antagonistic behavior towards wild animals such as Asiatic black bear, common leopard etc. by local villages which they develop during the Human – wildlife conflict situations.

MISCELLANEOUS

1. Long term monitoring of Hangul, Kashmir Musk Deer, Asiatic black bear, Himalyan Brown Bear and common leopard using satellite- telemetry.
2. Monitoring the population growth of Kashmir Musk Deer, Hangul.
3. Genetic studies on hangul and Kashmir Musk Deer population viability.
4. Impact of tourism on the sanctuary wildlife ecosystem and its management.
5. Effect of the sheep breeding farm on the eco – system and the management of the Rajparian Wildlife Sanctuary.
6. Effect of pesticide used in the adjoining apple and cherry orchid on the ecosystem and bird community structure of the Rajparian Wildlife Sanctuary.
7. Long term study on man-animal conflict around the Rajparian Wildlife Sanctuary to identify the factors responsible.
8. Study on the status and distribution of Kashmir Musk deer and Himalayan Brown Bear in the Rajparian wildlife sanctuary.
9. Study on small mammals of the Rajparian wildlife

sanctuary.

10. Study on medium size predator of the Rajparian wildlife sanctuary.
11. Study on the status of Brown bear and other high altitude mammals of the Rajparian wildlife sanctuary.
12. Study on insects and butterflies of the Rajparian wildlife sanctuary to understand the community structure.

TRAINING AREAS



- Wildlife and forest protection laws.
- Handling arms and modern combat.
- Management and handling of man-animal conflict situation.
- Management of ranging patterns of animals especially large carnivores.
- Nature interpretation.
- Population dynamics and wildlife estimation.
- Animal health and nutrition.
- Participatory rural appraisal and micro planning.
- Ecology and population biology.
- First Aid.
- Intelligence gathering.
- Management of captivity animals.
- Basic wildlife forensics.

Infrastructure

At present basic facilities such as accommodation, field equipment, laboratory, museum, vehicle, library and computer facility etc. for conducting research are virtually nonexistent. There is need for providing some facilities for augmenting research works in the Rajparian Wildlife Sanctuary such as dormitory and laboratory.

PROPOSED STAFF FOR RAJPARIAN WILDLIFE SANCTUARY



RE-ORGANISATION PROPOSAL

Range	Bringi Valley (Head Quarter: Achabal)		
Block	Lower Bringi HQR: Daksum	Upper Bringi HQR: Zampathri	Leich Nar Top (Control Room)
Compartments	21/K, 22/K, 23/K, 24/K	25/K, 26/K	Summer Camping for Anti-grazing/ Anti-poaching activities

Block	No. of Beats	No. of Compartments	Staff				
			Range Officer Grade I st	Block forester	Wildlife guard	Wildlife Watcher	Helper
Lower Bringi	02	04	01	02	06	05	06
Upper Bringi	02	02		01	04	05	05

THE MINISTRIAL STAFF FOR THE RANGE IS PROPOSED AS UNDER

S.no	Post	Proposed Strength
01	Camp Clerk (Jr. Asstt.)	01
02	Computer Operator	01
03	Driver	02
04	Chowkidar	03
05	Orderly	02

BUDGET

Abstract of Distribution of Expenditure for Rajparian WLS during the Plan Period 2021-2030

SN	Items / Activities	Distribution during Plan Period (in Lac)										Total
		1st Year (2021-22)	2nd Year (2022-23)	3rd Year (2023-24)	4th Year (2024-25)	5th Year (2025-26)	6th Year (2026-27)	7th Year (2027-28)	8th Year (2028-29)	9th Year (2029-30)	10th Year (2030-31)	
6.1.1	Boundary Delineation	44.75	0.00	4.25	20.00	2.00	27.25	17.00	4.25	17.25	15.25	152.00
6.3.1	Habitat Management	16.20	20.90	11.20	1760	1760	20.80	27.90	15.40	22.80	20.20	190.60
6.3.2	Protection, Surveillance & Anti Grazing	10.00	10.00	10.00	10.00	10.00	12.00	12.00	12.50	13.50	13.50	113.50
6.3.3	Controlling of Poaching	44.50	47.00	41.50	37.00	15.50	20.50	50.50	41.50	19.00	45.00	362.00
6.3.4	Fire Management											
	Fire Lines	0.00	8.25	0.00	6.00	3.00	6.00	4.50	8.25	6.75	6.90	49.65
	Need Based Engagement	0.00	5.00	5.00	5.00	5.00	6.00	6.00	6.00	6.00	6.00	50.00
	Fire Watchtowers	0.00	19.00	16.00	3.00	19.00	23.00	23.00	23.00	23.00	23.00	172.00
	Control Burning	0.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00	32.00
	Awareness	6.00	6.00	5.00	5.00	6.00	7.50	7.50	7.50	8.50	8.50	67.50
	Fire Fighting Equipments	6.00	6.00	6.00	6.00	6.00	7.50	7.50	7.50	9.00	9.00	70.50
6.3.5	Soil Moisture & Water Conservation	23.00	23.00	23.00	22.00	22.00	27.50	27.50	27.50	32.00	32.00	259.50
6.3.6	Man-Animal Co-existence	67.00	77.00	57.00	63.00	72.00	76.00	76.00	76.00	99.50	80.50	744.00
6.3.7	Animal Health Monitoring & Rehabilitation of Rescued Animals	36.00	31.50	31.50	31.00	31.00	40.50	40.50	30.50	26.50	29.00	328.00
6.3.8	Capacity Building	9.50	11.50	9.50	8.00	5.50	8.00	8.00	8.50	9.50	9.50	87.50
6.3.9	Infrastructure Development	10.00	89.00	42.00	54.00	52.00	25.00	11.50	17.50	8.00	18.00	327.00
7.2	Tourism and Interpretation & Conservation Education	42.50	63.00	51.50	51.50	52.00	46.50	34.50	49.50	38.50	64.00	493.50
8.3	Eco Development	4.50	4.50	4.50	4.50	4.50	6.00	6.00	6.00	7.00	7.00	54.50
9.0	Research, Survey & Monitoring	5.50	5.50	5.50	5.50	5.50	10.00	10.00	10.00	11.00	11.00	79.50
	Establishment of Research & Training Centre	0.00	10.00	5.00	3.00	5.00	5.00	5.00	5.00	5.00	7.00	50.00
	Grand Total	325.45	440.15	331.45	355.10	336.60	379.05	378.90	360.40	366.80	409.35	3683.3

Distribution of Expenditure for Rajparian WLS during the Plan Period 2021-2030

SN		Items / Activities	Unit	Distribution during Plan Period (₹ in Lac)																								Total	
				1st Year		2nd Year		3rd Year		4th Year		5th Year		6th year		7th year		8th year		9th year		10th year							
				(2021-22)	(2021-22)	(2022-23)	(2022-23)	(2023-24)	(2023-24)	(2024-25)	(2024-25)	(2025-26)	(2025-26)	(2026-2027)	(2026-2027)	(2027 - 2028)	(2027 - 2028)	(2028 -2029)	(2028 -2029)	(2029 -2030)	(2029 -2030)	(2030 - 2031)	(2030 - 2031)						
Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.				
6.1.1		Boundary Delineation																											
i	No.	Correction and re-fixing of boundary pillars	150	6.75	---	0.00	50	2.25	---	0.00	---	0.00	50	2.25	0.00	0.00	50	2.25	50	2.25	50	2.25	50	2.25					
ii	ft.	Erection of chainlink fencing to consolidate boundaries	3365	35.00	---	0.00	---	0.00	1923	20.00	---	0.00	2315	25.00	1442.00	15.00	0.00	1442.00	15.00	962	10.00								
iii	LS	Making of digitalization demarcation-records	LS	3.00	---	0.00	LS	2.00	---	0.00	LS	2.00	0	0.00	LS	2.00	LS	2.00	0	0.00	LS	3.00							
		Total		44.75		0.00		4.25		20.00		2.00		27.25		17.00		4.25		17.25		15.25		152.00					
6.3.1		Habitat Management																											
i	No.	Making of water holes	4	2.40	---	0.00	2	1.20	---	0.00	4	2.40	3	1.80	6.00	3.60	6.00	3.60	4	2.40	2	1.20							
ii	No.	Maintenance of old water holes	2	0.80	2	0.80	---	0.00	6	2.40	3	1.20	2	0.80	3	1.20	2	0.80	3	1.20	3	1.20							
iii	No.	Plantation of fruit bearing / conifers plants	---	0.00	40000	9.60	---	0.00	30000	7.20	---	0.00	30000	7.20	40000	9.60	0	0.00	30000	7.20	20000	4.80							
iv	No.	Beating up casualties	10000	2.50	---	0.00	10000	2.50	---	0.00	10000	2.50	0	0.00	10000	2.50	0	0.00	10000	2.50	0	0.00							
v	LS	Maintenance of plantation closures by way of deweeding / grasses	LS	1.00	LS	1.00	LS	1.50	LS	0.00	LS	2.00	LS	2.00	LS	1.00	LS	1.50	0	0.00	LS	2.00							
vi	LS	Eradication of weeds and unpalatable grasses in the wildlife habitat and corridors		2.50	LS	2.50	---	0.00	LS	1.00	LS	2.50	LS	1.50	LS	2.00	LS	1.50	LS	1.50	LS	2.00							
vii	LS	Bio fencing to augment artificial fencing	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	1.50	LS	2.00	LS	2.50	LS	2.50	LS	3.00							
viii	LS	Plantation of indigenous grass species such as red and white clover	LS	3.00	LS	3.00	LS	2.00	LS	3.00	LS	3.00	LS	3.50	LS	3.50	LS	3.00	LS	3.00	LS	3.50							
ix	LS	Providing of supplementary feed for Han-gul and Black Bears (bachas / green and fresh vegetables / salt licks and apples		2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50							
		Total		16.20		20.90		11.20		17.60		17.60		20.80		27.90		15.4		22.80		20.20		190.60					
6.3.2		Protection, Surveillance & Anti Grazing																											
i	LS	Cattle proof fencing at vulnerable entry points	LS	25.00	LS	25.00	LS	25.00	LS	25.00	---	0.00	LS	0.00	LS	30.00	LS	20.00	LS	0.00	LS	20.00							
ii	LS	Maintenance of cattle proof fencing	---	0.00	LS	2.00	---	0.00	LS	2.00	LS	3.00	LS	2.00	LS	2.00	LS	3.00	LS	3.00	LS	3.00							
iii	LS	Mapping of grazing routes	---	0.00	LS	0.50	---	0.00	LS	0.50	LS	1.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00							
iv	LS	Making of anti-grazing camps during summer in upper areas and on vulnerable entry points	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.50	LS	2.50	LS	2.50	LS	3.00	LS	3.00							
v	LS	Engagement of labour force for anti-grazing camps	LS	5.00	LS	5.00	LS	5.00	LS	5.00	LS	5.00	LS	8.00	LS	8.00	LS	8.00	LS	8.00	LS	10.00							
		Providing of logistic facilities to the anti-grazing staff during camp periods with necessary equipments																											
	LS		LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	3.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00							

SN	Items / Activities	Unit	Distribution during Plan Period(in Lac)																				Total	
			1st Year (2021-22)		2nd Year (2022-23)		3rd Year (2023-24)		4th Year (2024-25)		5th Year (2025-26)		6th year (2026-2027)		7th year (2027 - 2028)		8th year (2028 - 2029)		9th year (2029-2030)		10th year (2030 - 2031)		Phy.	Fin.
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.				
vii	Purchase of camping tents, utensils, flash lights, self protection tools and water proof jackets, trowsers and hunters shoes	LS	10.00		LS	10.00	700		---		0.00	2.00	LS	3.00	LS	3.00	LS	0.00	LS	4.00				
	Total		44.50			47.00		41.50			37.00		20.50			50.50		41.50			45.00		362.00	
	6.3.3	Control on Poaching																						
	i	Anti-poaching camps at vulnerable areas	LS	3.00		LS	3.00	3.00	LS	LS	3.00	3.00	3.00	LS	3.50	LS	3.50	LS	4.00	LS	4.00			
viii	Patrolling of areas to combat anti- poaching activities by way of engaging labour force	LS	3.00		LS	3.00	3.00	LS	LS	3.00	3.00	3.00	LS	3.50	LS	3.50	LS	4.00	LS	4.00				
	ii	Making of patrolling paths	LS	2.50		LS	2.50	2.50	LS	LS	2.50	2.50	2.50	LS	3.00	LS	3.00	LS	3.00	LS	3.00			
	iii	Providing of logistic facilities to the anti-poaching staff during camp periods	LS	1.50		LS	1.50	1.50	LS	LS	1.50	1.50	1.50	LS	2.00	LS	2.00	LS	2.50	LS	2.50			
	Total		10.00			10.00		10.00			10.00		12.00			12.00		12.50		13.50		113.50		
6.3.4	Fire Management																							
	Fire Lines																							
i	Making of fire lines in forest fire prone areas	Km	0.00		20	6.75	---	0.00	10	4.50	5	2.25	10	4.50	10	4.50	15	6.75	15	6.75	12	5.40		
ii	Maintenance of old fire lines	Km	0.00		10	1.50	---	0.00	10	1.50	5	0.75	10	1.50	0.00	0.00	10	1.50	0	0.00	10	1.50		
iii	Need Based Engagement																							
	Engagement of need based labourers for fire fighting operations	MD	0.00		2222	5.00	2222	5.00	2222	5.00	2222	5.00		6.00	2666	6.00	2666	6.00	2666	6.00	2666	6.00		
	Fire Watchtowers																							
	iv	Construction of new fire watchtowers in fire prone areas	LS	0.00		LS	16.00	16.00	LS	---	0.00	16.00	16.00	LS	20.00	LS	20.00	LS	20.00	LS	20.00	20.00		
v	Repair / renovation of existing fire watchtowers	LS	0.00		LS	3.00	---	0.00	LS	3.00	3.00	3.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00	3.00			
vi	Control Burning																							
	Control burning by way of engagement of labour force	MD	0.00		1333	3.00	1333	3.00	1333	3.00	1333	3.00	1778	4.00	1778.00	4.00	1778	4.00	1778	4.00	1778	4.00		
	Awareness																							
	vii	Conducting of awareness programmes / seminars to educate people especially living near forests with regard to Dos and Don'ts while forest fires	LS	4.00		LS	4.00	3.00	LS	LS	3.00	4.00	4.00	LS	5.00	LS	5.00	LS	6.00	LS	6.00			
viii	Distribution of literature material	LS	2.00		LS	2.00	2.00	LS	LS	2.00	2.00	2.00	LS	2.50	LS	2.50	LS	2.50	LS	2.50	2.50			
	Fire Fighting Equipments																							
	Purchase of fire fighting suits	LS	2.00		LS	2.00	2.00	LS	LS	2.00	2.00	2.00	LS	2.50	LS	2.50	LS	3.00	LS	3.00	3.00			
	x	Purchase of fire fighting equipments	LS	4.00		LS	4.00	4.00	LS	LS	4.00	4.00	4.00	LS	5.00	LS	5.00	LS	6.00	LS	6.00			
	Total		12.00			47.25		35.00		28.00	42.00		54.00			52.50		56.25		57.25	57.40	441.65		
6.3.5	Soil Moisture & Water Conservation																							
i	Construction of check dams to augment habitat	LS	7.00		LS	7.00	700	LS	LS	6.00	6.00	6.00	LS	7.50	LS	7.50	LS	8.00	LS	8.00	8.00			

SN	Items / Activities	Unit	Distribution during Plan Period (₹ in Lac)																								Total	
			1st Year		2nd Year		3rd Year		4th Year		5th Year		6th year		7th year		8th year		9th year		10th year							
			Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.				
6.3.8	Capacity Building																											
	Following trainings for front line staff:	LS	7.00	LS	5.00	LS	3.00	LS	2.00	LS	2.00	LS	2.00	LS	5.00	LS	5.00	LS	5.00	LS	4.00	LS	4.00					
	Use of tranquilizing guns																											
	Intelligence gathering																											
	Wildlife crimedetection																											
	Preparation of offencereports																											
	Wild plant and animalidentification																											
	Unarmed combat and survivalskills																											
	Handling of Man-Animal Conflict situations																											
	Swimming, driving and firstaid																											
	Use of GPS and making of KMZ, KML, pologons, tracks & waypoints																											
	Damage / poaching / grazing / encroachment cases																											
	Fire fighting																											
	Procurement of field equipments	LS	---	0.00	LS	4.00	LS	4.00	LS	3.50	LS	3.50	LS	5.00	LS	5.00	LS	5.00	LS	6.00	LS	6.00						
	Providing of field gears to front line staff	LS	2.50	2.50	LS	2.50	LS	2.50	LS	2.50	---	0.00	LS	3.00	LS	3.00	LS	3.50	LS	3.50	LS	3.50						
	Total			9.50		11.50		9.50		8.00		8.00		5.50		8.00		8.50		9.50		9.50	87.50					
6.3.9	Infrastructure Development																											
	Construction of residential quarter for Range Officer	LS	---	0.00	LS	30.00	LS	20.00	LS	20.00	LS	15.00	LS	3.00	LS	2.00	LS	1.50	LS	1.50	LS	1.50						
	Construction of staff quarters	LS	---	0.00	LS	20.00	LS	15.00	LS	10.00	LS	15.00	LS	3.00	LS	2.00	LS	1.50	LS	1.50	LS	1.50						
	Repair / renovation of all buildings periodically as per requirement	LS	10.00	5.00	LS	7.00	LS	5.00	LS	5.00	LS	5.00	LS	5.00	LS	5.00	LS	3.00	LS	3.00	LS	3.00						
	Repair / renovation / up-gradation of road inside Rajparian WLS	LS	---	0.00	LS	4.00	---	0.00	LS	4.00	LS	2.00	LS	4.00	LS	2.50	LS	1.50	LS	2.00	LS	2.00						
	Construction of bridges / culverts	LS	---	0.00	LS	30.00	---	0.00	LS	15.00	LS	15.00	LS	10.00	LS	0.00	LS	10.00	LS	0.00	LS	10.00						
	Total			10.00		89.00		42.00		54.00		52.00		25.00		11.50		17.50		8.00		18.00	327.00					
	Eco-Tourism and Interpretation & Conservation Education																											
	To conduct nature awareness camps for schools and colleges	LS	2.00	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	1.00	LS	3.00	LS	3.00	LS	5.00	LS	5.00						
	Visitor management by way of awareness among tour operator, taxi drivers and guides etc.	LS	2.00	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.50	LS	2.50	LS	2.50	LS	3.00	LS	3.00						
	Printing of awareness and publicity material	LS	2.00	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.50	LS	2.50	LS	2.50	LS	3.00	LS	3.00						
	Organizing of extension programmes in fringe areas with Panchayats and VDC	LS	1.50	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50						
	Purchase of audio visual equipments for NIC	LS	3.50	3.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	3.00	LS	3.00						
	Conducting of study tour for staff to other PA and states	LS	2.00	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.50	LS	2.50	LS	2.50	LS	3.00	LS	3.00						

SN		Items / Activities	Unit	Distribution during Plan Period (in Lac)																				
				1st Year		2nd Year		3rd Year		4th Year		5th Year		6th year		7th year		8th year		9th year		10th year		Total
				Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	
	vii	Construction of toilet block at feasible locations	LS	---	0.00	LS	20.00	LS	15.00	LS	15.00	LS	15.00	LS	15.00	0	0.00	LS	15.00	0	0.00	LS	15.00	
	viii	Creation of professional short movies and documentaries based on nature education	LS	LS	2.00	LS	2.50	LS	2.50	LS	3.00	LS	3.00	LS	4.00	LS	4.00	LS	4.00	LS	4.00	LS	4.00	
	ix	Installation of CCTV and metal detectors	LS	LS	2.00	LS	2.00	LS	1.50	LS	1.50	LS	1.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	3.00	
	x	Development of website for information decimation and online permission	LS	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	LS	2.50	
	xi	Conducting of seminars, workshops and publish report annually	LS	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00	
	xii	Theme based information displays in tourism and awareness zones	LS	LS	2.00	LS	2.00	LS	2.00	LS	1.50	LS	1.50	LS	3.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00	
	xiii	Establishment of Sovinier shop cum cafeteria in tourism zone for display of information of endemic wildlife	LS	LS	20.00	LS	20.00	LS	15.00	LS	15.00	LS	15.00	LS	5.00	LS	5.00	LS	5.00	LS	5.00	LS	15.00	
		Total			42.50		63.00		51.50		51.50		52.00		46.50		34.50		49.50		38.50		64.00	493.5
8.3		Eco Development																						
i		Providing of gas connections and solar lantern to fringe area community	LS	LS	3.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00	LS	4.00	LS	4.00	LS	4.00	LS	4.00	LS	4.00	
ii		Training of local youth as eco-guides	LS	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	2.00	LS	2.00	LS	2.00	LS	3.00	LS	3.00	
		Total			4.50		4.50		4.50		4.50		4.50		6.00		6.00		6.00		7.00		7.00	54.50
9.0		Research, Survey & Monitoring																						
i		Census of musk deers	LS	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00	LS	3.00	
ii		Census of leopard and black bears	LS	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	1.50	LS	4.00	LS	4.00	LS	4.00	LS	4.00	LS	4.00	
iii		Purchase of census / survey equipments	LS	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	2.00	LS	3.00	LS	3.00	LS	3.00	LS	4.00	LS	4.00	
		Establishment of Research & Training Centre																						
iv		Maintenance of research and training centre in Rajparian WLS	LS	---	0.00	LS	10.00	LS	5.00	LS	3.00	LS	5.00	LS	5.00	LS	5.00	LS	5.00	LS	5.00	LS	7.00	
		Total			5.50		15.50		10.50		8.50		10.50		15.00		15.00		15.00		16.00		18.00	129.50
		Grand Total			325.5		440.2		331.5		355.1		336.6		379.1		378.9		360.4		366.8		409.4	3683.3



PART-III

Form 1. Restoration of Habitat: Weed Control, Initial Operation

Sl. no	Location & name of site	Year	Extent of area(ha)	Species of weed	Operation	Total cost	Cost per ha	Remarks
1	2	3	4	5	6	7	8	9

Note: Location: By compartment, site name or land feature
 Operation: Uprooting, cutting, burning, ploughing, manual or by using animals or machinery
 Remarks: Measure of success and/or problem faced.

Form 2. Restoration of Habitat: Weed Control, Subsequent Operation

Sr. no	Location & name of site	Year	Extent of area(ha)	Complete or partial coverage	Species of weed	Operation	Total cost	Cost per ha	Remarks
1	2	3	4	5	6	7	8	9	10

Note: Location: By compartment, site name or land feature
 Operation: Uprooting, cutting, burning, ploughing, manual or by using animals or machinery.
 Remarks: Percent cover of weed/s before operation, problems, if any

Form 3. Restoration of Habitat: Soil Conservation Measures- Initial Operation and Subsequent Maintenance

Sr. no	Location & name of site	Year	Extent of area(ha)	Area treated	Operation	Total cost	Cost per ha	Remarks
1	2	3	4	5	6	7	8	9

Note:

Location: By compartments, name of site or landmarks and marking of geo coordinates

Extent of area:

Total area identified for such treatment. In case of streams or gullies, the length involved.

Area Treated:

If linear feature then quote length; otherwise area.

Operation:

Structures involved such as gully plugs, trench-cum-mound, terracing, spurs and bunds etc. quote quantity nos. and cmt. of earthwork.

Remarks:

Mention if initial work or maintenance.

Form 4. Restoration of Habitat: Planting, Sowing – Initial Operation

Sl. no	Location	Year	Extent of area(ha)	Species	Planting stock	Spacing	Operation	Total cost	Cost per ha	Remarks
1	2	3	4	5	6	7	8	9	10	11

Note: Location:

Planting Stock: Kind and condition e.g. root shoot, naked root seedling, seedlings in polythene bags, age or average size.

Operation: Mention site preparation if any, crowbar holes, pits and pit size, trench, seed sowing (rate), tussock planting (norms), protection measures.

Remarks: Mention operational problems if any.

Form 5. Restoration of Habitat: Response of Plantings, Sowing and Subsequent Operations

Sr. no	Location	Year	Extent of area(ha)	Species	Survival%	Casualty replacement	Operation	Total cost	Cost per ha	Remarks
1	2	3	4	5	6	7	8	9	10	11

Note: Location: By compartments, or landmarks.
 Casualty replacement: Mention planting stock by species, number & kind (polythene bag, root shoot, rhizome etc.).
 Operations: Planting, sowing technique, protection measures.
 Remarks: Operational problems, protection problems, any other useful information.
 Assess & mention survival percentage & growth before taking up casualty replacement.

Form 6. Restoration of Habitat: Area under Protection/Closure

Sl. no	Location	Year	Extent of area(ha)	Description of site	Regulations or protection measures	Response	Remarks
1	2	3	4	5	6	7	8

Note:

Location: By compartment or landmarks

Description of site: % tree, shrub, ground cover, main species, impact of factors causing perturbations.

Regulations &: Social fencing, power or other kind of fencing, enforced protection by patrolling, protection measures fire protection etc.

Response: To be recorded annually. Consider trend of regeneration, vegetation cover, change in structure and composition, wildlife use index.

Remarks: State problems or any other useful information, including alternatives if area is being used by people for specific purposes.

Form 7. Animals: Measuring Trends in Populations (Year)

Sl. No	Species	Population estimation methodology	Adult		Sub-adults		Yearlings	Fawns	Cubs	Total	Remarks
			Male	Female	Male	Female					
1	2	3	4	5	6	7	8	9	10	11	12

Note: Population: e.g. pugmark, line transect, scan, roadside counts etc., area covered, sampling intensity, estimation data treatment, extrapolation where involved. In case of indices of density or dung, count mention those figures under the remarks' column; use details as pertinent. Describe age classes for each species.
 Remarks: Operational problems, protection problems, any other useful information. Indices of density or dung count details to be recorded here.

Form 8. Animals: New Records

Sl. no	Species	Location	Year	How discovered	Details of age, number, sex	Habitat description	Remarks
1	2	3	4	5	6	7	8

Note: Animals will include vertebrates and invertebrates.

How discovered: Sighting, dead specimen, reliability of sighting, captured specimen, incontrovertible other evidence.

Number, age, sex etc: As applicable to vertebrates.

Habitat description: Broad habitat description such as vegetation, and elements such as water, large old trees, den trees, snags, down log material. Use microhabitat descriptors only if relevant.

Remarks: Any other useful information.

Form 9. Animals: Mortality other than that Attributable to an Offence

Sl. no	Species	Location	Year	Sex & age	Number	Discovered in what condition	Cause of mortality	Remarks
1	2	3	4	5	6	7	8	9

Note:

Location: By compartment, landmark etc.

Sex & age: As per parameters for age class. Sex, if possible to identify.

Discovered in what condition: Carcass, complete or partial. Skull or any other recognizable remains collected where only some remains of an animal are found.

Cause of mortality: If known e.g. territorial fight, accident, possible disease (following post-mortem results), old age, cause difficult to determine, predation etc.

Remarks:

Any other useful information.

Form 10. Animals: Mortality Attributed to Poaching or an act of Vandalism

Sr. No	Species	Location	Cause of Mortality				Remarks
			Number	Sex	Age	Class	
1	2	3	4				5

Note:

Location: By compartments or landmarks.

Cause of mortality: Whether the animal was intact or remains found, article or trophy to be recorded. Cause if known e.g. animal snared, shot or poisoned etc.

Remarks: Any other useful information, especially matters of illegal trade.

Form 11. Animals: Predation on Domestic Livestock by Wild Carnivores

Sr. no	Range	Month	Category of livestock killed	Location	Numbers	Ex gratia payment (Rs.)	Carnivore involved	No. of cases undecided	Remarks
1	2	3	4	5	6	7	8	9	10

Note: Category of livestock killed: Buffalo, cow, bullock (adult, sub-adult, and calf), camel, horse, donkey, sheep, goat, poultry etc.

Location: Comptt. no. or landmark where killed and the village of the owner.

Carnivore involved: Indicate species responsible for the kill if identity is confirmed.

No. of cases undecided: Either in progress or dropped.

Remarks: Record observations like - attended or unattended animal, killed in forest or waterhole or in the pen/shed, field and whether kill was in area closed to livestock trespass

Form 12. Animals: Killing of a Human by Wildlife or Injury caused

Sl. no	Range	Month	No. of incidents	No. of people killed sex & age	Location circumstances & species	No. of people injured sex & age	Location circumstances & species	Ex gratia payment (Rs.)
1	2	3	4	5	6	7	8	9

Note:

Location: Location by comppt no., the village to which the person belongs and a description of the circumstances and activity such as - open grassy patch, cutting grass; or under a mahua tree collecting and species flowers etc. Mention species responsible on proof.

Form 13. Animals: Wildlife Damage to Private or Public Property

Sl. no	Range	Month	The category of property	Extent of damage	Species involved and number	Remarks
1	2	3	4	5	6	7

Note:

Location: By comptt. no., village survey no., name of village or landmark.

Category of property: e.g. agriculture field-wheat, huts in a village, any kind of vehicle.

Extent of damage: Crop damage by area, estimated loss of produce and monetary loss. Similar yardsticks for other items like partial or total destruction of huts and belongings with estimated monetary loss.

Remarks: Any relevant information or circumstances e.g. a wild elephant was provoked by people.

Form 14. Plants: New Records

Sl. no	Family	Species	Years	Location	Habitat	Status	Remarks
1	2	3	4	5	6	7	8

Note: Habitat: Description by vegetation associates at various levels, % canopy closure if relevant, soil/site, microhabitat elements such as higher level of moisture, woody debris or humus etc.
Status: A broad idea on its frequency, national status e.g. endangered, rare, endemic etc.
Remarks: Any specific information

Form 15. Plants: Disease and Mortality

Sl. no	Species	Location	Year	Particulars of disease morbidity and mortality	Area affected	Remarks
1	2	3	4	5	6	7

Note:

Location: By compartment or landmarks.

Particulars of disease: In case of trees, the mortality by diameter classes and number, symptoms, insect pest activity or any other external indicators if visible, none if not seen. No mortality but infestation detected, mention that as morbidity.

Area affected:

In hectares.

Remarks: Any specific environmental condition or site factors you may suspect as being related to the problem or any other useful information.

Form 16. Plants: Illegal and Legal Collection

Sl. no	Species	Years	Location	Details of material	Habitat	Status	Remarks
1	2	3	4	5	6	7	8

Note: Location: By compartments or landmarks.

Details of material: To include timber, firewood, bamboo, NWPs. Plants collected could be of local significance or of trade significance on a national or international scale. Distinguish between legal and illegal activity in the remarks' column.

Quantity: In appropriation units.

Trade particulars: What is traded? Portions partially processed or processed material and where are the major trade centres, known or suspected to be?

Remarks: Any other useful information. Legal collection applies to PA, if permitted for research; to TUZ or to the buffer zone.

Form 17: Grazing of Domestic Livestock

Sl. no	Grazing unit no.	List of villages in the unit	Village wise listed population of cattle	Capacity of the unit (cattle units) and number of cattle grazed	Total cattle units grazed		Remarks
					Legal	Illegal	
1	2	3	4	5	6	7	8

Note:

Remarks:(i) Mention number of cattle immunized against FMD, RP, anthrax as the case might be and the number of cattle without the prophylactic cover. If grass is allowed to be cut for cattle being stall-fed, mention the village and number of such cattle.

Form 18. Inter-Agency Programs: Agencies and Schemes

Sl. no	No. of agency	Central or State	Number and name of scheme operated	Physical and financial targets		Area& Location	Remarks
				Given	Achieved		
1	2	3	4	5	6	7	8

Note: Name of the scheme: To include all activities in the Govt. sector, i.e. construction, use of resources, development processes etc. mention names of schemes, projects or normal operations. This will address all departments in the management area and those activities outside but capable of influencing the management area. Remarks: Success, adverse impacts, incompatibility with PA management objectives or failures should be mentioned. Detailed notes too go in the PA book.

Form 19. Programs of NGOs

Sl. no	No. of agency	HQ location	Number of scheme operated	Physical and financial targets		Area& Location	Remarks
				Given	Achieved		
1	2	3	4	5	6	7	8

Note: Remarks: Success or adverse impacts, incompatibility with PA management objectives or failures should be mentioned. Detailed notes to go in the PA book. These programs and activities could be within the management area or those that are outside the management area but are capable of influencing the state of the management area - either complementing the efforts or adversely impacting.

FORM – 20 Developing Infrastructure: Construction of boundaries Fences, CPTs, exclosures, enclosures (New)

Sl. No	Year	Category of construction	Location	Length (Mt)	Number	Specification	Remarks
1	2	3	4	5	6	7	8

Location: By compartment or suitable landmark.

Number: In case of enclosures, exclosures, number of pillars etc. as applicable.

Specification: As applicable to the construction: dry rubble, chain linl, local material, height, area, depth width etc.

Remarks: Any other relevant information

FORM – 21 Developing Infrastructure: Construction of boundaries Fences, CPTs, exclosures, enclosures (Existing)

Sl. No	Year	Category of construction	Location	Length (Mt)	Number	Specification	Remarks
1	2	3	4	5	6	7	8

Location: By compartment or suitable landmark.

Number: In case of enclosures, exclosures, number of pillars etc. as applicable.

Specification: As applicable to the construction: dry rubble, chain linl, local material, height, area, depth width etc.

Remarks : Any other relevant information

Sl. No	Year	Fire line Category or width	Name of points connected	Length (Mt)	Cost	Remarks
1	2	3	4	5	6	7

Location: By compartment or suitable landmark.

Number: In case of enclosures, exclosures, number of pillars etc. as applicable.

Specification: As applicable to the construction: dry rubble, chain lin, local material, height, area, depth width etc.

Remarks: Any other relevant information

FORM – 23 Fire out breaks

Outbreaks of fires	Year	Location	Extant (ha)	Dates	Reason	Estimated loss	Remarks
Detected				Controlled			

Location : By compartment

Reason : Established or suspected

Estimated Loss: e.g. no. of trees damaged, stacked firewood/timber/bamboo destroyed/damaged by volume and cost, wild animals dead, particulars of sensitivity sites affected, other property or life destroyed.

Remarks: State particularly problems encountered in detection and suppression and any other useful information. State also whether the extent of fire has been mapped.

Form 24: Offence cases detected Rajparian wildlife sanctuary

Sl. No.	Year	Category	Numbers	No. of cases detected	No. of cases under process	No. of cases compounded	Remarks
Successful							

Non PA status under management which do not involve an endangered species.(Schedule-I)

FORM – 25 Incentives and awards: Rajparian wildlife sanctuary

Sl. No	Year		No. of recipients of incentives for de-tecting offences	Amount paid (Rs)		Kind of award	No. of recipient	Remarks	
1	2		3	4		5	6	7	
No	Year	Title	Completed	Ongoing	New	Status	Financial outlay (Rs)	Expenditure incurred (Rs)	Remarks
1	2	3	4	5	6	7	8	9	10

Sl. No	Year	Title of survey, inventory activity	Completed	Ongoing	New	By PA	By other agency	Remarks
1	2	3	4	5	6	7	8	9

FORM – 27 The Monitoring programmes:

Sl. No	Year	Title of the programme	Date of initiation	Responsible agency	Technique	Status of collaboration and analysis of data	Remarks
1	2	3	4	5	6	7	8

FORM - 28 Eco development programmes: Targets and implementation

Sl. No	Year	Nature of the programme	Sector (Central/State) or NGO sponsored	Target set	Achievements	Village (buffer/enclaved)	Remarks
Physical		Financial		Physical		Financial	
1	2	3	4	5	6	7	8

Biogas plants, livestock improvement, establishment and development of sericulture, revival of local skills such as handicraft, water-harvesting systems, adult education. Etc.

Village: Site where programmes is being implemented-whether buffer or inside PA.

Remarks: State problems, state failures and thereof, reasons for not attaining targets, for non-implementation or deviation etc. State whether it is on the right tracks in context of achievement of objectives

Form 29. Construction*/Maintenance* Of Infrastructure: Roads & Bridges

Sl. no	Category	Range	Surface	Name & Number	Length covered (km)	Cross drainage works, bridges or culverts with types	Total costs and status
1	2	3	4	5	6	7	8

Note: Category of road: National highway, State highway, district road etc. public road, forest road or open only to managers should be stated. Surface type: Black topped metal, earth etc. Applies to roads.

Name or number: As the case may be.

Cross drainage type: e.g. for culverts - box, hume pipe culverts etc.

Bridge type: Wooden trestle, suspension, metal multi span, masonry arch etc.

Status: Work completed or ongoing. State also the agency responsibility; state whether operational or non-operational.

Strike out which is not applicable. Use separate forms as required; for construction & for maintenance details.

Form 30. Connecting Multi-Agency Programs In Landscape Based Planning Partners During Year:

Sr. No.	District	Sector/Central/State/ Other (Specify)	Agency & Work area/speciality	Program cover- age	Agreed input and mechanism	Financial implications / investment & source
1	2	3	4	5	6	7

Note: Col 4: Main agency agenda e.g. livestock production, health, education, irrigation etc.
Col. 5: Indicate by either administrative unit e.g. tehsil, or number of villages i.e. target
Col. 6: what has the agency agreed on to deliver? How? through agency plan/ scheme?

Form 31. Monitoring Extent and Quality of Multi-Agency Programs Year

Sr. No.	District	Sector/Central/ State/ Other (Specify)	Agency	Objectives & targets	Achievement & standard	Constraints	Extent of Investment	Remarks
1	2	3	4	5	6	7	8	9

Note: Col 6. The standard of achievement to be based on (i) verification of targets (ii) perception of satisfaction of people and their own assessment

Col. 7 (i) as reported by agency (ii) as perceived by people concerned

WILD ANIMAL HEALTH MONITORING

The Wild Animal Health Care Centre (WAHCC) is presently functioning from a make shift building located within the premises of Rescue Centre Dachigam. The centre is headed by Veterinary Officer who is working under the Administrative control of Regional Wildlife Warden, Kashmir. The following are important duties and responsibilities of the Veterinary Officer and his supporting staff.

1. Wild Animal Health Management

The centre caters to the needs of health care of wild animals in free range and captivity. As per the nature of the case timely medical/surgical intervention is undertaken to treat sick/injured animals. Intensive observation on every individual animal for their general health and other associated veterinary care is ensured.

Prevention and control of diseases is given much emphasis in addition to the treatment of the sick wild animals. Periodical supplementation of vitamins, mineral nutrients and essential amino acids is followed routinely to promote the good health.



Castration in Common Leopard



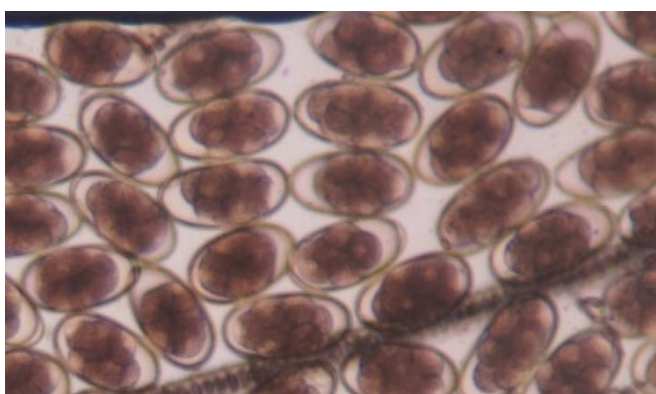
Thomas Splint in Spotted Deer

2. Disease investigation

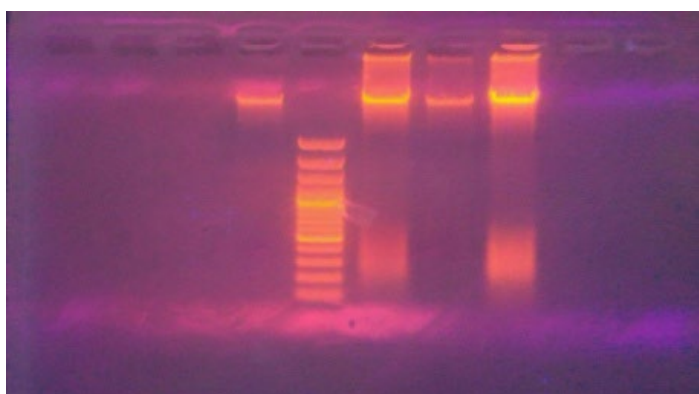
The wild animals suffer from variety of infectious, parasitic and non-infectious diseases. Diagnosis of disease is the most crucial aspect of disease investigation in wild animals and accurate diagnosis is vital to decide specific therapeutic and appropriate control measures. The samples such as blood, serum, urine, stool and other required specimens collected from the inmate animals and dead carcasses are investigated for general status of health, cause of disease/death etc. Postmortem of dead animals /birds is carried out routinely to ascertain the cause of death. Further samples collected during PM are analysed in collaboration with FVSc & AH, Shuhama, for confirmatory diagnosis of disease conditions. In addition to these investigations the specimens (Visceral organs, parasites etc) obtained during postmortem are collected, processed and stored in laboratory to serve as specimens for future reference and anatomical museum.



Laboratory investigation of fecal samples



Nematode eggs in fecal dropping of Barn owl x40



DNA extracted from the Kidney and Heart of Common Leopard (lane 3,4,5)

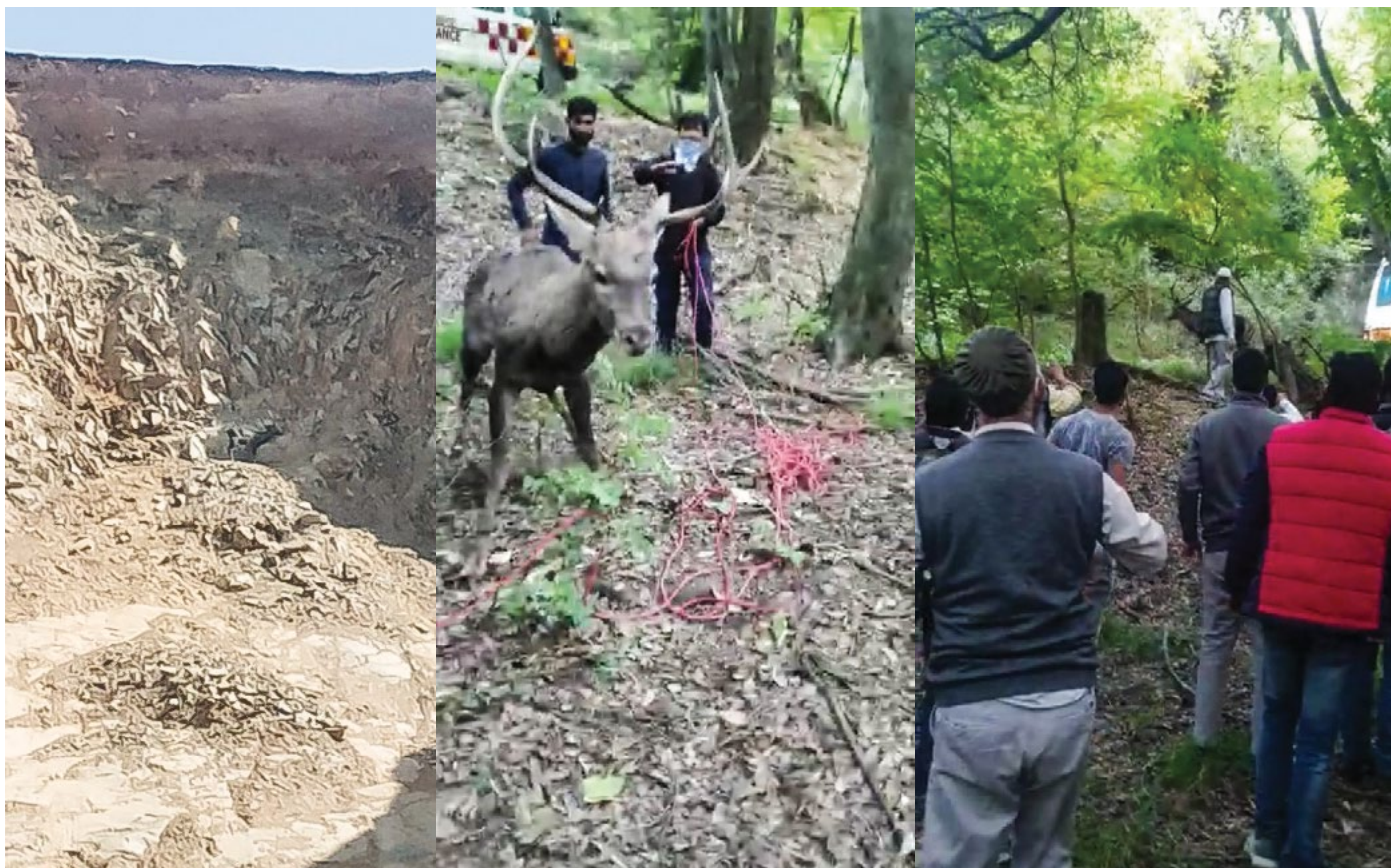
3. Rescue and Rehabilitation

All rescued animals, irrespective of the method used are chemically restrained for evaluation of its health condition and its suitability for release into the wild.

Healthy animals are released at or near the site of capture at the earliest. The animal's with minor bruises or lacerations are also released immediately with a first aid treatment, within its home range and are not transferred to rescue centre as transportation would mean further stress to the animal. Long acting antibiotics are given to all rescued animals for sustained therapeutic effects even after release.

However, if the animal has severe injuries, the animal is kept at the rescue centre with minimum exposure to humans for few days till its complete recovery and is then released back in the wild.

If the animal is to be placed in captivity for life time then the animal is housed as per standard protocol prescribed by the Central Zoo Authority of India.



Successful Rescue and Release of Adult Male Hangul

4. Feeding management of Rescued Animals

Improper feeding can cause severe health problems and adversely impact animal welfare. Improved nutrition is positively linked with immunity, disease prevention, growth, reproduction and longevity. In view of this all the rescued animals are being fed as per the guidelines of Central Zoo Authority of India enshrined in "Standardization of Animal diets in Indian Zoos". During the lean periods of the year supplementary feeding in the form of willow twigs and apples are provided to free ranging hangul and black bears respectively within the National park.



5. Practical trainings/workshops

This centre routinely organizes training programmes/workshops for capacity building of frontline staff of the department and Veterinary/Forestry students of SKUAST K regarding restraint, nutrition, management and health care of wild animals.



6. Transportation/translocation of Animals

Crating, shifting and transportation of rescued animals is done only under the supervision of Veterinary Officer.



Transportation of Rescued Snow leopard from Leh

7. Disinfection of Animal enclosures

Despite proper cleaning and washing of floor/animal sheds, there are chances for the accumulation of animal excreta which often gets mixed with urine and they get embedded in the crevices of floor or wall. Hence there may be a possibility of a heavy “build-up-of-Potentially Pathogenic microorganisms”. Under suitable environmental conditions, there is increase in the spread and survival of these microorganisms especially, when cleaning works are not done in a proper manner. As such it is ensured that animal enclosures are cleaned on routine basis with disinfectants having wide safety margin.



Disinfection of Animal Enclosures at Rescue Centre Dachigam

8. Disease control in Livestock

This centre routinely organizes awareness cum treatment camps for livestock owners inhabiting the fringes of the protected areas to prevent the spread of various infectious and parasitic diseases into the wild animal population.



Door to door FMD Awareness cum Survey in Mulnar, Fakir Gujri

9. Mobile Ambulatory Dispensary

The centre is equipped with 24x7 ambulatory vehicle to address health issues of rescued wild animals on spot during man animal conflict.



Other activities

The Veterinarian and his supporting staff are integral part of key conservation projects like satellite collaring of Hanguls, hangul census etc.



Tranquilization and Satellite collaring of Hangul

PROPOSED ACTIVITIES

Wild animal health monitoring is an important, yet often overlooked, component of the conservation of wild species. Just like humans and domestic animals, wild animal & birds are susceptible to various diseases that can cause morbidity and mortality resulting in a significant impact on the dynamics and the conservation status of their populations. Many of the causes of biodiversity loss may put wildlife at increased risk of disease spread through various stressors or from novel contact with other populations, other species or environmental pollutants.

While wildlife health is a growing concern for the conservation, there is still limited scientific knowledge about the prevalence of various diseases and their potential risk factors in key species of this Protected Area. A significant part of health assessment undertaken will include acquisition of baseline data of various physiological parameters and prevalence of infectious agents and endo/ecto parasites. With the introduction of exotic livestock germplasm in this part of country, there is high prevalence of various diseases in these animals as compared to indigenous animals which were very much resistant to diseases. There is commonality of diseases between wild ungulates and livestock species. The transmission of infectious diseases between wild and domestic animals is an important issue while dealing with conservation of endangered species. There are a number of interfaces within and on the fringes of this protected area where this critically endangered species can be exposed to domestic animal diseases resulting in severe consequences on their populations.

As such it is proposed:

1. To generate baseline data of various physiological parameters. This will serve as a guide to the health and physiological status of the individual animal in particular and of population in general. Apart from this, early detection of disease threats will help in rapid interventions to prevent spread of a particular disease in population.
2. To undertake comprehensive surveillance of pathogens in both wild and domestic animal populations.
3. To strengthen the infrastructure and capacity building of the frontline staff with regard to collection and preservation of samples.
4. To study the prevalence of various endo/ecto parasites among wild animal populations.
5. To organize awareness campaigns in fringe villages regarding prevention of various infectious and parasitic diseases among local livestock and their potential transfer into the wild animal population.
6. To develop a liaison with Animal Husbandry Department with respect to vaccination of livestock against various infectious diseases in the buffer regions of protected areas and sharing of information regarding occurrence of various diseases among livestock.
7. In addition to these it is proposed to establish to establish a quarantine facility in an isolated area within the Rescue centre Pahalgam separately for carnivores and herbivores.

ANNEXURES

ANNEXURE-I

WWF/JK/NP/53

HIS HIGHNESS' GOVERNMENT, JAMMU & KASHMIR

CHIEF SECRETARIAT.
(General Department.)

Amendment to Notifications under the Game Preservation Act 1998.

(1) Memorandum No. F/427/43 dated 25-6-45
from the Development Minister

(2)
ORDER No. 710 -C of 1945.
Dated 17 -7 - 1945.

The notification forming an annexure to this order
is sanctioned and it is directed that it be published in the
Government Gazette.

By order in Council.

Confirmed.
MAHARAJA.

PSC attested
Superintendent
Revenue

PRIME MINISTER

NOTIFICATION 2

WWF/JK/NP/5

In exercise of the powers conferred by Section 5 of the Jammu and Kashmir Game Preservation Act, 1998, and in supersession of Notification NO: 2 appended to the said Act, the Government are pleased to declare the following areas as Game Sanctuaries, Game Reserves and Reserved Areas respectively, namely:-

I. GAME SANCTUARIES, ✓

Kashmir Province.

- ✓ i. Rajparian and Bewai Basins in Nowbug Valley. ✓
- ✓ ii. Shankaracharya hill. ✓
- ✓ iii. Chuzmai basin in Arau valley.
- ✓ iv. *Dehgam as delineated in the Map annexed hereto*
Jammu Province.

- ✓ i. Somjani and Sapphire mines Nullah in Kishtwar.
- ✓ ii. Pond near Sri Gouri Sankar in Kishtwar.
- ✓ iii. Places sacred to all communities.

Ladakh

- ✓ i. Khushmul and Yimu basins in Baltistan.
- ✓ ii. Askor Nullah in Randu, Baltistan.

II. GAME RESERVES

CLASS A

Kashmir Province

- ✓ i. Achhabal Rakh,
- ✓ ii. Chhatargul Nullah in Sindh Valley.
- ✓ iii. Wangat Nullah in Sindh Valley.
- ✓ iv. Kendi and Khraas Nullah in the Uri Tehsil the lower boundary of which is the new road to Haji Pir.
- ✓ v. Astore shooting area as specified in Schedule A.
- ✓ vi. Kasing and Kafirkhan area including Salkhala, the Koji and Shamsburry Rakhs.

Jammu Province

- ✓ i. Shashera Forest- An area near Rajori in the Mirpur Forest Division.
- ✓ ii. Jhallangar Forest- An area near Reasi in the Reasi Forest Division.
- ✓ iii. Jasrota Forest I and II including Bagni Block- An area near Kathua in the Kathua Forest Division.

Ladakh

- ✓ i. Ovis Ammon Blocks (specified in Schedule A)
- ✓ ii. Sharnu Blocks (specified in Schedule A)

CLASS B

Kashmir Province.

- WVF/JK/WF
- (132)
- ✓ i. Chashmashahi Rakh.
 - ✓ ii. Ovra Rakh in Lidder Valley.
 - ✓ iii. Khirgam Rakh (Big Game area outside the State Rakh as delineated in the map A hereto annexed).
 - iv. Lower Dachhigam Rakh (as delineated in the map B hereto annexed). *deleted & omitted*
 - ✓ v. Ajjas (Big Game area as delineated in map C hereto annexed).
 - ✓ vi. Thajiwas Mullah as delineated in map D hereto annexed.

Jammu Province.

- ✓ i. Dalsar Rakh.
- ✓ ii. Warh Rakh.
- ✓ iii. Gurarh Rakh.
- ✓ iv. Mansar (Sagoon Rakh).
- ✓ v. Mansar (Tunnel Rakh).
- ✓ vi. Koran Rakh.
- ✓ vii. Kheri Rakh.
- ✓ viii. Agra Chak Rakh.
- ✓ ix. Badyal Rakh.
- ✓ x. Makwal Rakh.
- ✓ xi. Ramnagar Rakh.

Note:- Shooting or killing of pigs within five miles of the Game Reserves Class B is prohibited.

CLASS C

Kashmir Province.

- ✓ i. Hygam Jhil.
- ✓ ii. Mirgund Jhil.
- ✓ iii. The Pampur, Karanchu, Maniboog and Chandara Jhils.

III. RESERVED AREAS

Kashmir Province.

- ✓ i. Dara Chikor Area.
- ✓ ii. Nishat Chikor Area.
- ✓ iii. Bren Chikor Area.
- ✓ iv. Zewan area delineated in map E.
- ✓ v. Khirram Chikor Area, outside the State Rakh as delineated in map F.
- ✓ vi. Ajjas Chikor Area.

- vii. Wuyan Chikor Area situated between Khrew and Khunmoo Sakhs as delineated in map G.

Note:- Only two shoots will be permitted in Ajjas Chikor Area at the discretion of the Game Warden after His Highness the Maharaja Bahadur leaves for Jammu. No permits will be issued for Wuyan Chikor area after snowfall.

SCHEDULE A

- ✓1. The tributaries of the Indus from Dumbochik to Koyul.
- ✓2. The watershed of the Koyul river as far as its junction ^{with} the Indus, below this all tributaries, of the Indus as far as big bend of the river at Dungti.
- ✓3. Hanle river basin as far as south of Hangle Monastery.
- ✓4. Hanle river basin south of (3).
- ✓5. The tributaries of the Indus between the Hanle river and Puga river.
- ✓6. The country lying between 3 and 4 on the east 5 on the north and 6 on the west.
- ✓7. The basin of the Salt Lakes and tributaries of the Indus between (and including) the Puga river as far as the water of the Tiri Foo.
- ✓8. The basin of the Tsomoriri Lakes and the Phirsi Nullah.
- ✓9. The Tiri Foo and the country lying to the north bounded by Indus on the north and east, the Leh Kulu road on the west and the watershed of Tsoker ^{Camo} plain on the south.
- ✓10. The watershed of the Zera and Rukhchea South.
- ✓11. The watershed of the Marka river.
- ✓12. The Karnah Nullah.
- ✓13. The triangular area lying between Choosbal on the north, the Frontier on the east, the watershed of the Choosbal river and Chamtnag Foo on the west and the Indus on the south from Chamtnag to Dungti.
- ✓14. The catchment area of Tanse river.
- ✓15. The Changchenmo area.

SCHEDULE B

- ✓1. The Igu and Chimre Nullah.
- ✓2. Nag and Sabu.
- ✓3. Phyang and Tara.

4. Umla and Nomo.
5. Bazgo and Myel.
6. Kikir and Suspul and Valh-Drokpa.
7. Hemis Shupka, Nullah and Khalsi.
8. Damkar and Hanu.
9. Hemiskit and Wanla.
10. Iluchi and Lardu.
11. The watershed of the Zaskar and Marka river including the Skew Nullah.
12. Rumpakh.
13. Stock and Shang.
14. Masho.
15. Shera and Lockey.
16. Kandok.

**



Notification III

ADDENDUM TO SECTION 59 OF NOTIFICATION 4 OF THE
GAME ACT.

In exercise of the powers conferred by section 26 of the Jammu and Kashmir Game Preservation Act 1998, the Government are pleased to direct that the following further amendment shall be made in the Rules contained in Notification 4 issued under the said Act, namely:-

In rule 59 of the said Rules the full point at the end shall be deleted and the following proviso shall be added thereto, namely:-

" Provided that Hygam, Mirgund, Pampur, Karanohu, Maniboog and Chandara Game Reserves shall be treated as reserved areas for the purposes of allotment of shooting therein and issue of permits therefor."

Jb

S. Shrivastava

Notification IV

133
JK

In exercise of the powers conferred by sub-section (3) of section 1 of the Jammu and Kashmir Game Preservation Act, 1998, the Government are pleased to direct that the following amendment shall be made in Notification NO: 1 issued under the said Act namely:-

For the Schedule appended to the said Notification the following schedule shall be substituted namely:-

SCHEDULE -

List of State Parks.

Kashmir Province.

1. (Upper Dachigam including Grotto as demarcated.) *deleted & omitted*
2. Khunmoo and grass-land between Sangri and Chak Khunmoo.
3. Khrew including Ladu area (as demarcated).
4. Tral-cum-Khiram (as demarcated).
5. Khul basin in Awantipura Tehsil.
6. Anchar lake from retkundal to Sangam.
7. Hoker Sar Jhil.

Jammu Province.

1. Bahi.
2. Janghanoo.
3. Thanoo.
4. Kotli.
5. Tandah.
6. Badali.
7. Larsi.
8. Sansoo.
9. Nehranal.
10. Kothian Dhar along with ^{Sia} Sla and Thandapani areas (as demarcated).

Sia
Sia

ANNEXURE-II

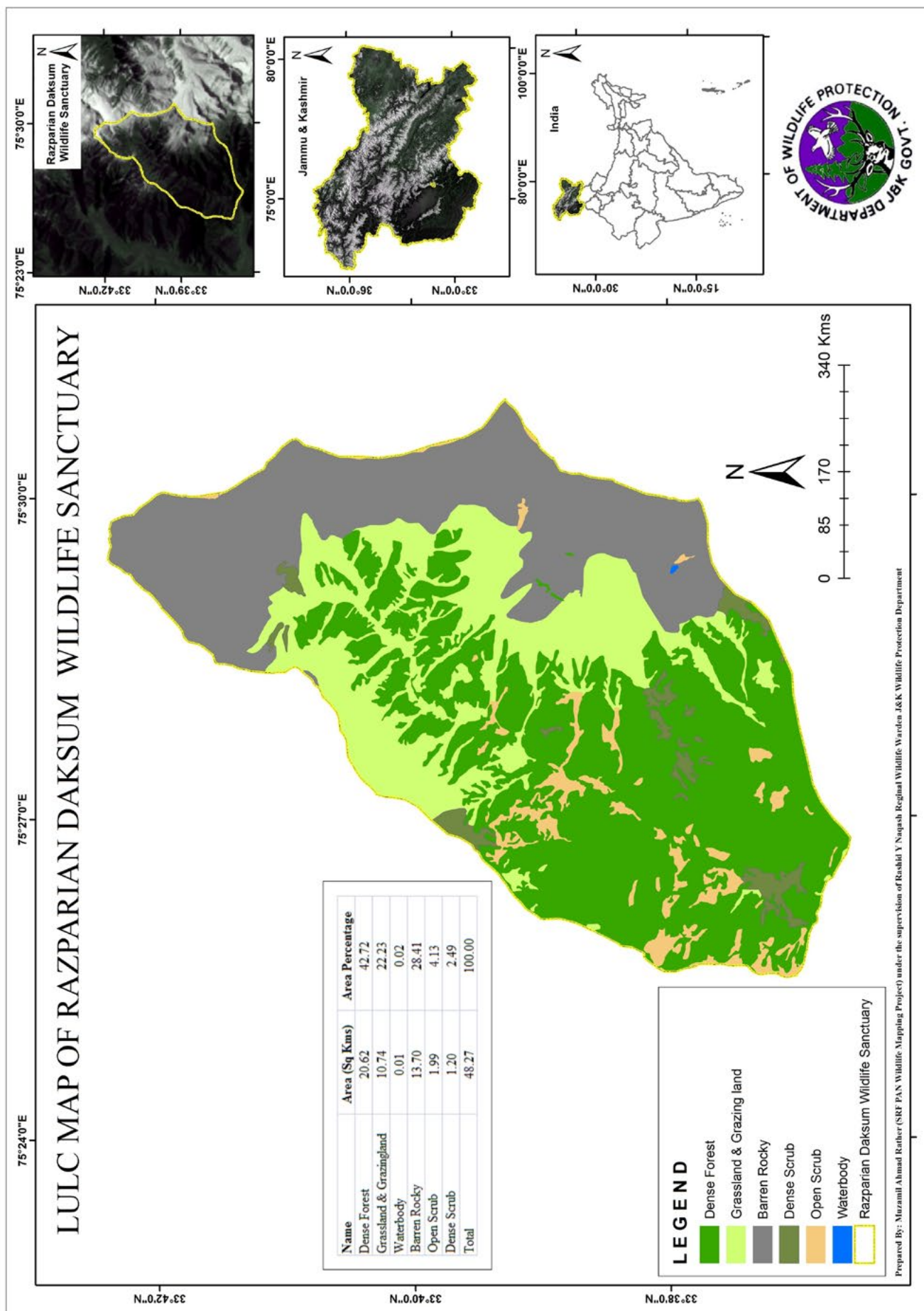


Fig 3. LULC of Rajparian Wildlife Sanctuary

ANNEXURE-III



FAUNA

Sr. No.	Common Name	Scientific Name
1.	Snow leopard	<i>Panthera Uncia</i>
2.	Common leopard	<i>Panthera pardus</i>
3.	Himalayan Brown Bear	<i>Ursus arctos isabellinus</i>
4.	Asiatic Black Bear	<i>Ursus thibetanus</i>
5.	Leopard Cat	<i>Prionailurus bengalensis</i>
6.	Jungle Cat	<i>Felis chaus</i>
7.	Red Fox	<i>Vulpes vulpes</i>
8.	Jackal	<i>Canis aureus</i>
9.	Hangul or Kashmir red deer	<i>Cervus elaphus hanglu</i>
10.	Himalayan Musk Deer	<i>Moschus leucogaster</i>
11.	Himalayan yellow-throated Marten	<i>Martes flavigula</i>
12.	Himalayan weasel	<i>Mustela sibirica</i>
13.	Long-tailed marmot	<i>Marmota caudata</i>
14.	Royle's vole	<i>Alticola roylei</i>
15.	Indian porcupine	<i>Hystrix indica</i>
16.	Himalayan Mouse hare	<i>Ochotona roylei</i>
17.	Common Langur	<i>Semnopithecus entellus</i>
18.	Rhesus macaque	<i>Macaca mulatta</i>

ANNEXURE-IV



AVI FAUNA

Sr. No.	Common Name	Scientific Name
Family: Acciptridae		
1.	Black Kite	<i>Milvus migrans</i>
2.	Sparrow hawk	<i>Accipiter nisus nisosimilis</i>
3.	Booted eagle	<i>Hieraaetus pennatus</i>
4.	Golden eagle	<i>Aquila chrysaetos</i>
5.	Eurasian griffon	<i>Gyps fulvus</i>
6.	White-rumped vulture	<i>Gyps bengalensis</i>
7.	Bearded vulture or Lammergeyer	<i>Gypaetus barbatus</i>
Family: Falconidae		
1.	Common kestrel	<i>Falco tinnunculus</i>
Family: Phasianidae		
1.	Himalayan Snowcock	<i>Tetraogallus himalayensis</i>
2.	Chukar	<i>Alectoris chukar</i>
3.	Himalayan Monal	<i>Lophophorus impejanus</i>
4.	Koklass Pheasant	<i>Pucrasia macrolopha</i>
Family: Columbidae		
1.	Snow Pigeon	<i>Columba leuconota</i>
2.	Blue Rock Pigeon	<i>Columba livia</i>
3.	Oriental Turtle Dove	<i>Streptopelia orientalis</i>
4.	Eurasian collard Dove	<i>Streptopelia decaocto</i>

5.	Red collard Dove	<i>Streptopelia tranquebarica</i>
6.	Spotted Dove	<i>Spilopelia chinensis</i>
Family: Psittacidae		
1.	Rose-ringed Parakeet	<i>Psittacula krameri</i>
2.	Slaty-headed Parakeet	<i>Psittacula himalayana</i>
3.	Indian Cuckoo	<i>Cuculus micropterus</i>
4.	Eurasian Cuckoo	<i>Cuculus canorus</i>
5.	Asian Koel	<i>Eudynamys scolopaceus</i>
Family: Strigidae		
1.	Eurasian Eagle Owl	<i>Bubo bubo</i>
2.	Little Owl	<i>Athene noctua</i>
3.	Long-eared Owl	<i>Asio otus</i>
Family: Apodidae		
1.	Himalayan Swift	<i>Aerodramus brevirostris</i>
2.	Alpine Swift	<i>Tachymarptis melba</i>
3.	Common Swift	<i>Apus apus</i>
4.	House Swift	<i>Apus nipalensis</i>
Family: Alcedinidae		
1.	Pied Kingfisher	<i>Ceryle rudis</i>
2.	Common Kingfisher	<i>Alcedo atthis</i>
3.	White-throated Kingfisher	<i>Halcyon smyrnensis</i>
Family: Coraciidae		
1.	European Roller	<i>Coracias garrulous</i>
Family: Upupidae		
1.	Common Hoopoe	<i>Upupa epops</i>
Family: Dicidae		
1.	Eurasian Wryneck	<i>Jynx torquilla</i>
2.	Scaly-bellied Woodpecker	<i>Picus squamatus</i>
3.	Grey-headed Woodpecker	<i>Picus canus</i>
4.	Himalayan Woodpecker	<i>Dendrocopos himalayensis</i>
Family: Alaudidae		
1.	Crested lark	<i>Galerida cristata</i>
Family: Hirundinidae		
1.	Dusky crag Martin	<i>Ptyonoprogne concolor</i>
2.	Barn Swallow	<i>Hirundo rustica</i>
3.	Long-tailed Shrike	<i>Lanius schach</i>
Family: Oriolidae		
1.	Eurasian golden Oriole	<i>Oriolus oriolus</i>
Family: Sturnidae		
1.	Common Starling	<i>Sturnus vulgaris</i>
2.	Common Myna	<i>Acridotheres tristis</i>
Family: Corvidae		
1.	Yellow-billed blue Magpie	<i>Urocissa flavirostris</i>
2.	House Crow	<i>Corvus splendens</i>
3.	Large-billed Crow	<i>Corvus macrorhynchos</i>
Family: Pycnonotidae		
1.	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>

Family: Muscicapidae		
• Sub-family: Timalinae		
1.	Variegated laughing-thrush	<i>Trochalopteron variegatum</i>
• Sub-family: Muscicapinae		
1.	Rusty-tailed Flycatcher	<i>Muscicapa ruficauda</i>
2.	Kashmir Flycatcher	<i>Ficedula subrubra</i>
3.	Little pied Flycatcher	<i>Ficedula westermanni</i>
4.	Slaty-blue Flycatcher	<i>Ficedula tricolor</i>
5.	Grey-headed canary Flycatcher	<i>Culicicapa ceylonensis</i>
6.	Asian-paradise Flycatcher	<i>Terpsiphone paradisi</i>
• Sub-family: Sylviinae		
1.	Plain leaf Warbler	<i>Phylloscopus neglectus</i>
2.	Tytler's leaf Warbler	<i>Phylloscopus tytleri</i>
3.	Tickell's leaf Warbler	<i>Phylloscopus affinis</i>
4.	Sulphur-bellied Warbler	<i>Phylloscopus griseolus</i>
5.	Yellow-browed Warbler	<i>Phylloscopus inornatus</i>
6.	Lemon-rumped Warbler	<i>Phylloscopus chloronotus</i>
7.	Blyth's leaf Warbler	<i>Phylloscopus reguloides</i>
8.	Gold-Crest	<i>Regulus regulus</i>
• Sub-family: Turdinae		
1.	Orange-flanked bush Robin	<i>Tarsiger cyanurus</i>
2.	Blue-capped Redstart	<i>Phoenicurus caeruleocephala</i>
3.	Black-Redstart	<i>Phoenicurus ochruros</i>
4.	White-winged Redstart	<i>Phoenicurus erythrogastrus</i>
5.	Plumbeous water Redstart	<i>Rhyacornis fuliginosus</i>
6.	Little Forktail	<i>Enicurus scouleri</i>
7.	Spotted Forktail	<i>Enicurus maculates</i>
8.	White-capped water Redstart	<i>Chaimarrornis leucocephalus</i>
9.	Blue rock Thrush	<i>Monticola solitarius</i>
10.	Blue whistling Thrush	<i>Myophonus caeruleus</i>
11.	Grey-winged Blackbird	<i>Turdus boulboul</i>
12.	Chestnut Thrush	<i>Turdus rubrocanus</i>
Family: Troglodytidae		
1.	Winter Wren	<i>Troglodytes hiemalis</i>
Family: Cinclidae		
1.	White-throated Dipper	<i>Cinclus cinclus</i>
2.	Brown Dipper	<i>Cinclus pallasi</i>
Family: Prunellidae		
1.	Alpine Accentor	<i>Prunella collaris</i>
2.	Altai Accentor	<i>Prunella himalayana</i>
Family: Pardae		
1.	Grey Tit	<i>Parus afer</i>
2.	Green-backed Tit	<i>Parus monticolus</i>
3.	Spot-winged Tit	<i>Periparus melanolophus</i>

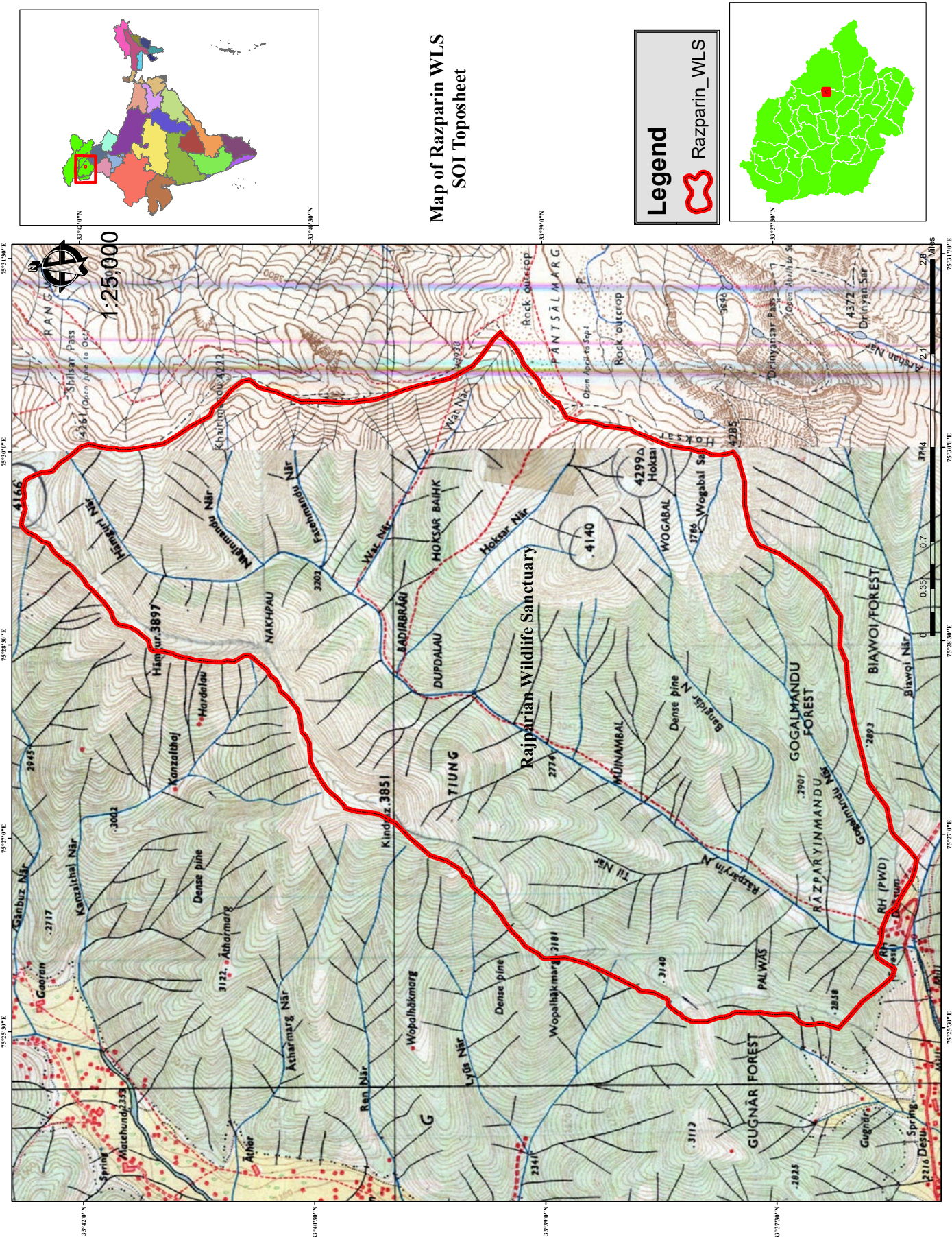
ANNEXURE-V



STATEMENT SHOWING DETAILS OF HUMAN / CATTLE POPULATION OF VILLAGES FALLEN IN THE VICINITY OF RAJPARIAN WILDLIFE SANCTUARY DAKSUM

S No.	Name Of Village.	Human Population		Cattle population				
		No. of Cholas.	Population.	Cattle	Buffaloes	Horses	Sheep	Goat
1	Daksum	20	132	133	45	05	210	-
2	Deesu	658	2622	610	170	11	790	15
3	Chakoora	140	726	120	30	19	245	20
4	Goganad	48	230	22	10	14	200	06
TOTAL	866	3710	885	255	49	1445	41	

ANNEXURE-VI



ANNEXURE-VII



LIST OF BUILDINGS EXISTING INSIDE RAJPARIAN WILDLIFE SANCTUARY

Sr. No.	Name of the structure	Number
1.	Old Rest house	01
2.	Inspection hut	01
3.	Staff quarter (one each of tin, wooden and Concreate)	03
4.	Watch tower cum staff quarter	01
5.	Public convenience near inspection hut	01
6.	Viewpoints near inspection hut	02
7.	Sheep sheds	11
8.	Office complex	02
9.	Staff quarters	08
10.	Grain store	02



Boulevard Road, Near Lalit Grand Palace, Srinagar –
190001 Tel/Fax No: 0194-2501069
(May - October).
Manda - Hills (Near Ashoka Hotel), Jammu – 180005,
Tele/Fax: 0191-2572570
(November - April)
Website: www.jkwildlife.com
Email: jkwildlife78@gmail.com
jkwildlife72@gmail.com

GOVERNMENT OF JAMMU & KASHMIR
OFFICE OF THE PR. CHIEF CONSERVATOR OF FORESTS (WILDLIFE)/
CHIEF WILDLIFE WARDEN

Subject: Approval of Management Plan for Rajparian Wildlife Sanctuary.

Whereas; the-Draft Management Plan of Rajparian Wildlife Sanctuary has been prepared for the first time by Wildlife Warden South.

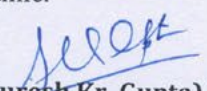
Whereas; the draft of said management Plan has undergone various reviews at different levels and suggestions and objections made by the participants were incorporated.

Whereas; the committee constituted vide this office order No: 13 of 2020 dated 08.01.2020 held its meetings on 07-12-2020, 06-02-2021 and 20-09-2021 to discuss the Draft Management Plan for Rajparian Wildlife Sanctuary.

Whereas; the above said committee recommended for approval of Management Plan of Rajparian Wildlife Sanctuary for a period 2021-22 till 2030-31 in the final meeting held on 20-09-2021 subject to the incorporation of suggested points in the meeting.

Whereas; the Regional Wildlife Warden, Kashmir vide his No: RWLW/K/Tech/2021-22/1972-73 dated 30.03.2022 has submitted that the suggested points in the final meeting of committee have been incorporated in Management Plan of Rajparian Wildlife Sanctuary and accordingly recommended for its approval.

Therefore, under the authority vested under Sections 33 of Wildlife Protection Act, 1972 the undersigned accords approval to the Management Plan for Rajparian Wildlife Sanctuary for the period 2021-22 till 2030-31, subject to the condition that all activities as per the prescriptions in the Management Plan shall be undertaken within provision of Wildlife Protection Act, 1972 and orders of the Hon'ble Supreme Court/ High Court of J&K issued from time to time.


(Suresh Kr. Gupta) IFS
Pr. Chief Conservator of Forests/
Chief Wildlife Warden
Jammu & Kashmir

No: WLP/Res/2021-22/423-26
Copy to the:

dated: 30-03-2022.

01. Commissioner/ Secretary to Government, Forest Ecology & Environment Department, Civil Secretariat, J&K, Jammu for kind information.
02. Regional Wildlife Warden, Kashmir.
03. Wildlife Warden, South Division.
04. Pvt. Secretary to Pr. Chief Conservator of Forests & HoFF, J&K for kind information of PCCF/HoFF.

ACCHABAG WILDLIFE SANCTUARY

Government of Jammu and Kashmir
Civil Supply Forest Department.

Subject: - Organisational set up of the Wildlife Protection Department.

GOVERNMENT ORDER NO. 128 - FST - CF - 1991.

DATE: 13-5-1991.

Sanction is accorded to the organisational set up (with jurisdiction) of the Wildlife Protection Department, where in addition to the Chief Wildlife Warden, the Department will have three Regional Wildlife Wardens (at present DCF) one each for Jammu Region, Kashmir Valley and Ladakh Region, and each Region will have Divisions (under DCF/Wildlife Warden) and then Ranges under each Division as detailed below:-

- (a) Wildlife Region Jammu.
 - i/ Wildlife Warden Chinab Valley Headquarter Kishtwar.
 - ii/ Wildlife Warden, Jammu East Headquarter Kathua (Mansar till accommodation arranged at Kathua)
- (b) Wildlife Region Kashmir.
 - i/ Wildlife Warden North (Kashmir) Headquarter Sopore.
 - ii/ Wildlife Warden South (Kashmir) Headquarter Bijnahara.
 - iii/ Wildlife Warden Central Headquarter Srinagar. He will also assist the Chief Wildlife Warden in day to day work besides field work.
- (c) Wildlife Region Ladakh (Leh) Hq. Leh.
 - i/ Wildlife Warden, Leh.
 - ii/ Wildlife Warden, Kargil.

Each Wildlife Warden will have the following Ranges under them:-

- (a) Wildlife Warden Chenab Valley (Kishtwar).
 - i/ Kishtwar Wildlife Range with Headquarter at Parimahal (Ikhala). Kishtwar High Altitude National Park (between Ikhala to Sunder).
 - ii/ Sirchi Wildlife Range (Hdqr. Yordoo). Kishtwar High Altitude National Park (Between Manzal to Yordoo)

Contd.....p.2.

(b) Wildlife Warden Jammu (Hdqr. Kathua (Mansar till accommodation arranged).

i/ Mansar Wildlife Range (Hdqr. Mansar).

ii/ Jammu Wildlife Range (Hqr. Jammu).

iii/ Jasrota Wildlife Range (Hqr. Jasrota).

iv/ Rajouri Poonch Wildlife Range.

(c) Wildlife Warden North (Kashmir) Hdqr. Sopore/Daramulla.

i/ Wildlife Range Daramulla.

ii/ Wular Wildlife Range Sopore.

iii/ Lolab Valley Wildlife Range, Kupwara.

iv/ Lakes Wildlife Range, Hokra.

i/ Baramulla Wildlife Sanctuary.

ii/ Trikuta Wildlife Sanctuary.

iii/ Sudhanagdev Wildlife Reserve (as additional charge).

i/ Ramnagar Wildlife Sanctuary.

ii/ Nandni Wildlife Sanctuary.

iii/ Dahu Wildlife Sanctuary.

iv/ Mahamaya City Forest (Proposed).

v/ Kukarian Wetland Reserve.

vi/ Pargwal Wetland Reserve.

vii/ Nanga Wetland Reserve.

viii/ Gurana Wetland Reserve.

i/ Jasrota Wildlife Sanctuary.

ii/ Thoin Wetland Reserve.

iii/ Sangral Wetland Reserve.

This Range is yet to be surveyed.

i/ Lachipora Wildlife Sanctuary.

ii/ Limber Wildlife Sanctuary.

iii/ Naganari Wildlife Reserve.

iv/ Sheeri Wildlife Reserve.

v/ Boniyar Wildlife Reserve.

vi/ Nambla Wildlife Reserve.

vii/ Kapispora Wildlife Reserve.

viii/ Gantamulla Wetland Reserve.

i/ Hygam Wetland Reserve.

ii/ Wular Lake and adjacent Wetland.

iii/ Zawoora Wildlife Reserve.

iv/ Harwan Wildlife Reserve.

v/ Zalur Wildlife Reserve.

vi/ Watlab (Kunis) Wildlife Reserve.

vii/ Ajas Wildlife Reserve. *chk.*

viii/ Guréz Area.

Kalran, Machal and Lolab Area. (To be surveyed and till then post of Wular Wildlife Range as additional charge)

i/ Hokra Wetland Reserve.

ii/ Mirgund Wetland Reserve.

iii/ Nadroo Wetland Reserve.

iv/ Narkara Wetland Reserve.

v/ Dori Nambal Wetland Reserve.

vi/ Gulmarg Wetland Sanctuary.

Contd. p. 3.

(d) Wildlife Warden South (Kashmir)
Hqr. Bijnahara.

- | | |
|---|--|
| 1/ Liddar Valley Wildlife Range.
Hqr. Pahalgam (Summer)
Cura (Winter) | ✓ 1/ Cura Wildlife Sanctuary.
ii/ Adu Wildlife Sanctuary.
iii/ Chumbhal Wildlife Reserve →
iv/ Khiram Wildlife Reserve.
v/ Pahalgam and Aishmuqam Chakore areas. |
| ii/ Tral Wildlife Range.
Tral. | ✓ 1/ Shikargah Wildlife Reserve.
ii/ Pannay Wildlife Reserve.
iii/ Khanagund Wildlife Reserve.
iv/ Chakore Reserve Tral. |
| iii/ Bringi Wildlife Range.
Hqr. Kukarnag. | ✓ 1/ Daksum (Rajparian) Wildlife Sanctuary.
ii/ Achhabal Wildlife Sanctuary.
iii/ Sof Chakore Reserve.
iv/ Tunnel Chakore Reserve. |
| iv/ Pirpanjal Wildlife Range.
Hqr. Shopian. | ✓ 1/ Hirpora Wildlife Sanctuary.
ii/ Yousmarg Areas.
iii/ Wetlands falling within the tehsils of Pulwama and Shopian. |

(e) Wildlife Warden Central
Hqr. Srinagar.

- | | |
|--|--|
| 1/ Sindh Valley Wildlife Range.
Hqr. Ganderbal. | 1/ Thajwas Wildlife Sanctuary.
ii/ Shalabugh Wetland Reserve.
iii/ Chattergul Reserve.
iv/ Wangat Reserve.
v/ Anchar Reserves. |
| ii/ National Park Range.
Hqr. Dachigam | ✓ 1/ Dachigam National Park.
ii/ Dara Wildlife Reserve.
iii/ Nishat Wildlife Reserve.
iv/ Dal areas.
v/ City Forest National Park.
vi/ Cheshmachahi Reserve.
vii/ Shalabugh Sanctuary.
viii/ Drain Wildlife Reserve.
ix/ Harwan. |
| iii/ Khrew Wildlife Range.
Hqr. Khrew. | ✓ 1/ Khunmoh Wildlife Reserve.
ii/ Khrew Wildlife Reserve.
iii/ Chatlam Wetland Reserve.
iv/ Manibugh Wetland Reserve.
v/ Kranchoo Wetland Reserve.
vi/ Chakore Reserve Wuyan between Khrew and Khunmoh. |

(f) Wildlife Warden, Leh.

- | | |
|--------------------------------|---|
| 1/ Leh Wildlife Range,
Leh. | 1/ Hemis High Altitude National Park.
ii/ Proposed Rizong Wildlife Sanctuary.
iii/ Shanj Wildlife Reserve.
iv/ Sabu Chakore Reserve. |
|--------------------------------|---|

11/ Changthang Wildlife Range,
Hqr. XMyoma.

- i/ Changthang Cold Desert Wildlife Sanctuary.
- ii/ Proposed Gya-Miru Wildlife Sanctuary.
- iii/ Nourichan Wetland Reserve.
- iv/ Hanlay Wetland Reserve.
- v/ Cheshul Wetland Reserve.
- vi/ Pangong Wetland Reserve.
- vii/ Tsombari Wetland Reserve.

iii/ Nubra Wildlife Range,
Hqr. Diskit.

- i/ Karakoram (Nohra - Shayok) Wildlife Sanctuary.

(9) Wildlife Warden, Kargil.

i/ Kargil Wildlife Range,
Kargil.

- i/ Kanji Wildlife Reserve.
- ii/ Bodh-Kharbo Wildlife Reserve.
- iii/ Proposed Shimsha Kharboo Wildlife Reserve.
- iv/ Proposed Gurgurdo Wildlife Sanctuary.
- v/ Proposed Umba Wildlife Sanctuary.
- vi/ Proposed Broko Wildlife Sanctuary.
- vii/ Proposed Nimdum Wildlife Sanctuary.

ii/ Zaskar Wildlife Range
Hqr. Padam.

- i/ Proposed Rangdum Wildlife Sanctuary.
- ii/ Proposed Lungnag Wildlife Sanctuary.
- iii/ Proposed Tongri Wildlife Sanctuary.
- iv/ Proposed Rezonag Wildlife Sanctuary.

The office of the Chief Wildlife Warden, besides having the Administration, prosecution and Accounts Sections will also have the following sections:-

I) Research and Survey Unit.

This unit will be responsible for all matters relating to research and survey and will thus have jurisdiction over the whole of the State.

II) Veterinary Unit.

This unit is headed by a Veterinary Asstt. Surgeon and will work directly under the control of the Chief Wildlife Warden.

III) Asstt. Wildlife Warden (HQ)

He will be incharge of the following jobs:-

- a/ Antipoaching.
- b/ Fur Trade.
- c/ Shikar Sale Licence in Srinagar.
- d/ Sale of ammunition.

Contd....p.5.

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Engineering Wing:

Engineering Wing of the Wildlife Department will be headed by the Assistant Engineer and will be in charge of execution of works.

This Government Order is subject to the following conditions:-

1. The Chief Wildlife Warden would neither promote any officer against the post nor give charge of the higher post than the one is already having and would man this Organization with the existing staff already sanctioned for the Wildlife Protection Department.
2. The jurisdictions mentioned in the Government Order will be subject to condition that areas have been transferred from the Forest Department to the Wildlife Protection Department and declared as such under proper notification under Wildlife Protection Act.
3. No interwing adjustments/transfers within the Wildlife Protection Department will be allowed without approval of the Admin. Department if such wing has not been sanctioned.
4. Staff for Engineering, Legal and Accounts wings would not be recruited directly and would be taken on deputation from the concerned Department.
5. Preference would be given to the staff from the Forest Department to man the Organisation.
6. No adhoc appointments would be made against vacant sanctioned posts without approval of the Admin. Department.

By Order of the Government of Jammu and Kashmir.

Sd/-

(N. R. Gupta)

Commr/Secretary to Government
Forest Department

NO: FST-9/WL/90

DATE: 18-5-1991

Copy for the information and necessary action to the:-

1. Pr. Chief Conservator of Forests, Srinagar.
2. Chief Wildlife Warden, Srinagar.
3. Chief Conservator of Forests, Jammu/Kashmir.
4. Pvt. Secretary to Advisor (H).
5. P.A. to Commr/Secretary (Forests).
6. Government Order File.
7. Monday Return File (w.3.s.c).
8. Stock File.

Deekay

Under Secretary to Government
Forest Department



ECO-SENSITIVE ZONE OF RAJPARIAN WILDLIFE SANCTUARY



भारत का राजपत्र The Gazette of India

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अधिसूचना

नई दिल्ली, 18 जून, 2020

का.आ. 1958(अ).—एक प्रारूप अधिसूचना भारत के राजपत्र, असाधारण में भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना संख्या का.आ. 3461 (अ), तारीख 23 सितम्बर, 2019 द्वारा प्रकाशित की गई थी जिसमें उन सभी व्यक्तियों से, जिनको उससे प्रभावित होने की संभावना थी, उस तारीख से, जिसको उक्त अधिसूचना से युक्त राजपत्र की प्रतियां जनता को उपलब्ध करा दी गई थी, साठ दिन की अवधि के भीतर, आक्षेप और सुझाव आमंत्रित किए गए थे;

और, उक्त प्रारूप अधिसूचना से युक्त राजपत्र की प्रतियां जनता को 25 सितम्बर, 2019 को उपलब्ध करा दी गई थीं;

और, प्रारूप अधिसूचना के उत्तर में व्यक्तियों और पणधारियों से कोई आक्षेप और सुझाव प्राप्त नहीं हुए;

और, राजपरियन वन्यजीव अभयारण्य 33°36'30" से 33°42'30"उ और 75°25'30" से 75°31'15"पू के मध्य और जम्मू-कश्मीर संघ राज्य क्षेत्र में कश्मीर घाटी के अनंतनाग जिले में श्रीनगर शहर के दक्षिणी भाग पर लगभग 90 किलोमीटर की दूरी पर स्थित है। अभयारण्य का क्षेत्रफल 48.28 वर्ग किलोमीटर है;

और, राजपरियन वन्यजीव अभयारण्य और इसके समीपवर्ती क्षेत्र महत्वपूर्ण जीवजन्तु प्रजातियों की वितरण श्रेणी के अंतर्गत आते हैं जिनमें कस्तूरी मृग (मोस्चस मोस्चीफेरस), हिमालयी भूरा भालू (उर्सस आर्कटोस इसाबेलिनस), एशियाई काला भालू (उर्सस थिबेटनस) और सामान्य तेंदुआ (पैंथेरा पार्डस) आदि शामिल हैं। अभयारण्य कश्मीर के महत्वपूर्ण पर्यटन स्थल डाक्सुम ग्राम के बैकट्राप में स्थित है। क्षेत्र में सतत पर्यटन कार्यनीति बनाये रखने के लिए यह जरूरी है कि वनों और

इसके आसपास के क्षेत्रों को पारिस्थितिकी संवेदी जोन में अधिसूचित किया जाए। इसके अतिरिक्त, अभयारण्य के एक भाग में इस समय विभाग का भेड़ प्रजनन फार्म है। अभयारण्य के अंतर्गत दाईं ओर ऐसे फार्म विद्यमान हैं जिनसे वनस्पतियों और जीवजन्तुओं को सीधे खतरा है। भेड़ फार्म द्वारा गर्मियों में चराई भूमि के रूप में वन क्षेत्र के बड़े भाग का उपयोग किया जाता है, जिससे जंगली शाकाहारियों के बीच प्रतिस्पर्धा रहती है। इसके अतिरिक्त पालतू भेड़ों से जंगली जानवरों को हमेशा बीमारियां फैलने का खतरा रहता है। क्षेत्र को पारिस्थितिकी संवेदी जोन घोषित करने से इस भेड़ प्रजनन फार्म को इसके वर्तमान स्थल से अन्यत्र करना होगा;

और, ऊंचाई, आकार और मिट्टी में भिन्नता के कारण, मार्ग में वनस्पतियों की विविधता देखी गई है। अभयारण्य में विद्यमान वन प्रकारों की चार भिन्न विविधताएं हैं। इन्हें इस प्रकार से वर्गीकृत किया जा सकता है: (क) तटवर्ती वनस्पति:- इस प्रकार की वनस्पति मुख्य रूप से डकसुम के पास राजपरियन नाले के सहायक नालों के किनारे खातान पथरी तक सीमित है। मुख्य रूप से कुछ बड़े पत्ते वाले जेनेरा जैसे *एस्क्युलस इंडिका*, *जुगलन्स रेगिया*, *रुबिनिया*, *मॉरस*, *क्वेरकस इन्काना*, *रिसस सक्सेडेनिया*, *केल्टिस कैवाकासिका*, *पूनस पर्सिका*, *उल्मस वालिचियाना*, *कोरेक्लस कोलुर्ना*, *पडस कॉर्नुटा* आदि हैं। भूमि पर झाड़ियों की अधिकता है जिनमें क्षेत्र में विद्यमान *पैरोटियाप्सिस जैक्वामोंटियाना*, *बूबरनम* के साथ रोज़ा प्रजातियां, *बर्बेरीस प्रजाति*, *रुबस*, *एस्क्युलस इंडिकस*, *लोनिकेरा* और *इंडिगोफेरा प्रजातियां*, *डेमोडियम*, *जैस्मीन* और *इसोडोन* शामिल हैं। (ख) शंकुधारी वन:- यह सदाबहार कैल वन (*पिनस ग्रैफ़िथी*) का है, जिसमें स्पूस (*पिका स्मिथियाना*) है, अन्य चौड़ी पत्तीदार प्रजातियों के साथ *एस्क्युलस इंडिका*, *क्वेरकस इंकाना* और फर (*एबिस पिंज़ो*) समुदाय हैं, जो अभयारण्य की खड़ी ढलानों तक सीमित हैं। ऊंचाई पर, स्पूस (*पिका स्मिथियाना*), *पिनस वलिचियाना*, हेटरनथा झाड़ियों के साथ पाया जाता है। कुछ जगहों पर बिर्च (*बेतुला यूटिलिस*) की चौड़ी पत्ती प्रजातियाँ कैली (*पीनस ग्रिफीथी*) और स्पूस के साथ काफी पाई जाती हैं, इसके अलावा सोबोरिआ टोमेंटोसा, रोज़ा प्रजाति, वाइबरम प्रजातियों के साथ पाई जाती है। (ग) एल्पाइन चरागाह और झाड़ियां:- यहाँ ज्यादातर बिर्च (*बेतुला यूटिलिस*), वन-मार्ग की अज्ञात घासों, कुछ स्थानों में रोडोडेंड्रोन, कॉम्पैनुलैटम, रोज़ा और रुबस प्रजाति प्रजातियों के साथ स्पूस (*पिका स्मिथियाना*) और कुछ स्थानों पर जुनिपरस, इंडिगोफेरा, प्रिमुला, एनेमोन, मायोसोटिस हैं। (घ) रॉक फ़ेस:- इस क्षेत्र में पाई जाने वाली वनस्पति अधिकतर पहाड़ी की चोटियों और खड्डों तक सीमित होती हैं जिन्हें 'नरस' कहा जाता है और मोटी घास, जुनिपरस प्रजातियां और रोडोडेंड्रन प्रजातियों द्वारा प्रतिनिधित्व किया जाता है;

और, पश्चिमी हिमालय औषधीय और सुगंधित पौधों का एक भंडार-गृह है जिसका उपयोग औषधीय और इत्र उद्योगों में किया जाता है। राजपरियन वन्यजीव अभयारण्य में अति औषधीय महत्व की असंख्य पौधों की प्रजातियाँ हैं। इस क्षेत्र में जंगली उगने वाले कुछ औषधीय पौधों में *एकोनिटम हेट्रोफिलम*, *अर्नबिया बेंटमाइ*, *आर्टेमिसिया एबसिंथियम*, *बर्बेरीस लायसियम*, *बर्जेनिया लिंगुलाटा*, *धतूरा स्ट्रैमोनियम*, *डायोस्कोरिया डेल्टोइडिया*, *लवटेरा कैशमेरियाना*, *सोसुरिया कोस्टस* और *टैक्सस वालिचाइना*, आदि शामिल हैं।

और, राजपरियन वन्यजीव अभयारण्य (डकसम) कई सामान्य, दुर्लभ और लुप्तप्राय स्तनधारी प्रजातियों का पर्यावास है जिसमें कस्तूरी मृग (*मोस्चस मोस्चीफेरस*), सीरो (*कैपरिकोरनिस सुमत्रेनिस*), हिमालयन मर्मोट (*मर्मोट हिमालियाना*), हिमालयन माउस-हेर (*ओकोटोना सेइली*), कश्मीर उड़न गिलहरी (*इग्लौकोमिस फ़ाइब्रायटस*), हिमालयन यलो थ्रोटेड मार्टिन (*मार्टेस फ़्लाविगुला*), ब्राउन भालू (*उर्सस इसाबेलिनस*), एशियाटिक ब्लैक बियर (*उरसस थिबेटानस*), लाल लोमड़ी (*वुलपस मोंटाना*), सियार (*कैनिस ऑरियस*), छोटे भारतीय नेवला (*हर्पेस्टेस एरोप्रीकटैटस*), तेंदुआ (*पैंथेरा पार्डस*), सामान्य ग्रे लंगूर (*सेम्नोपिथेकस अजाक्स*), रीसस मकाक (*मैकाका मुलाटा*), हिम तेंदुआ (*पैंथेरा अनसिया*), शामिल हैं। अभयारण्य में पाई जाने वाली प्रमुख पक्षी प्रजातियाँ ब्लैक इअरड काइट (*मिल्वस माइग्रेंस*), हिमालयन ग्रिफॉन गिद्ध (*जिप्स हिलायन्सिस*), व्हाइट बैकड गिद्ध (*स्यूडोपस बेंगालेंसिस*), मोनाल (*लोफोफोरस इम्पेजैनस*), हिमालयन स्नो कॉक (*टेट्राओगैलस हिमालैन्सिस*), चुकर (*एलेक्टोरिस चुकर*), कोकलास (*पेरसिया मैकरोलोफा*), ब्लू रॉक कबूतर (*कोलंबा लिबिया*), हिमालयन रूफस कछुआ कबूतर (*स्ट्रेप्टोपेलिया ओरिएंटलिस*), रिंग डव (*एस. डेकोटा*), लाल कछुआ कबूतर (*एस. ट्रेक्सुबैरिका*), एशियाई कोयल (*क्यूक्यूलस सेतुराटस*), अल्पाइन स्विफ्ट (*तचीमराप्टिस मेल्बा*), कश्मीर रोलर

(कूसियस गैसरुल्लस सेमेनवी), कॉमन हॉपे (उपूपा एपोप्स), कश्मीरी कठफोड़वा (ट्रायबेटस हिमालयनासिंस), कॉमन स्वालोव (हिरंदो रुस्टिका), रुफस बैकड थ्राइक (लैनिअस स्कैच), यूरोशियन गोल्डन ओरियोल (ओरियोलस ओरियोलस), भारतीय मैना (एक्रीडोथेरेस ट्रिस्टिस), लार्ज बिल्ड क्रो (कोरवस मैक्रोरिनचोस), लार्ज स्पॉटेड नटक्रैकर (नुसिफ्रेगमुही पंकटाटा), व्हाइट चेकड बुलबुल (पाइकोनोटस ल्यूकोजेन्स), स्ट्रेकड लॉफिंग थ्रश (ट्रोक्लेप्टेरॉन लिनेनटम), कश्मीर वरेन (ट्रोग्लोडाइटस नेगलेक्टस), ग्रे टीट (पारस मेजर), कश्मीर हाउस गौरैया (पासेर डोमेस्टिकस), आदि हैं;

और, राजपरियन वन्यजीव अभयारण्य में पाए जाने वाले महत्वपूर्ण दुर्लभ, लुप्तप्राय और संकटापन्न प्रजातियां भूरा भालू (संकटापन्न), कश्मीर कस्तूरी मृग (संकटापन्न), सामान्य तेंदुआ (वलनेरेवल), हिम तेंदुआ (संकटापन्न), विअरडेड गिद्ध (निकटवर्ती खतरा), कश्मीर फ्लाईकैचर (वलनेरेवल), आदि हैं;

और, राजपरियन वन्यजीव अभयारण्य के चारों ओर के क्षेत्र को, जिसका विस्तार और सीमाएं इस अधिसूचना के पैरा 1 में विनिर्दिष्ट हैं, पारिस्थितिकी और पर्यावरणीय की दृष्टि से पारिस्थितिकी संवेदी जोन के रूप में सुरक्षित और संरक्षित करना तथा उक्त पारिस्थितिकी संवेदी जोन में उद्योगों या उद्योगों की श्रेणियों के प्रचालन तथा प्रसंस्करण को प्रतिषिद्ध करना आवश्यक है;

अतः, अब, केन्द्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) (जिसे इसमें इसके पश्चात् पर्यावरण अधिनियम कहा गया है) की धारा 3 की उपधारा (1) तथा उपधारा (2) के खंड (v) और खंड (xiv) एवं उपधारा (3) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, जम्मू-कश्मीर संघ राज्य क्षेत्र के अनंतनाग जिले के राजपरियन वन्यजीव अभयारण्य की सीमा के चारों ओर 0 (शून्य) से 1 किलोमीटर तक विस्तारित क्षेत्र को पारिस्थितिकी-संवेदी जोन (जिसे इसमें इसके पश्चात् पारिस्थितिकी संवेदी जोन कहा गया है) के रूप में अधिसूचित करती है, जिसका विवरण निम्नानुसार है, अर्थात् :-

1. पारिस्थितिकी संवेदी जोन का विस्तार और सीमा.-(1) पारिस्थितिकी संवेदी जोन का विस्तार राजपरियन वन्यजीव अभयारण्य की सीमा के चारों ओर 0 (शून्य) से 1 किलोमीटर तक विस्तृत है और पारिस्थितिकी संवेदी जोन का क्षेत्र 22.60 वर्ग किलोमीटर है। 'प्रवेश के लिए दक्षिणी भाग की ओर प्रस्तावित पारिस्थितिकी संवेदी जोन का शून्य विस्तार इस कारण से था कि विद्यमान त्रिन्नी नाला के आकार में भौगोलिक सीमा है। जम्मू प्रांत में चेनाब नदी जलग्रहण क्षेत्र जलनिकासी के अंतर्गत उक्त भाग पारिस्थितिकी संवेदी जोन उपबंधित मानचित्र में ए1 से ए4 तक के अंतर्गत के क्षेत्र के कारण विस्तार शून्य रखा गया है, इसके अलावा 4000 मीटर से अधिक (समुद्र के स्तर से ऊपर) की ऊंचाई पर प्राकृतिक चट्टानों से प्राकृतिक रूप से विभाजित है, जबकि अभयारण्य के चारों ओर 30 मीटर से 1000 मीटर तक है, अभयारण्य के अतिरिक्त गलियारे को पारिस्थितिकी संवेदी जोन के रूप में प्रस्तावित किया गया है। उक्त क्षेत्र मुख्य रूप से वन क्षेत्र से घिरा हुआ है। इससे क्षेत्र में वन्यजीवों और समृद्ध जैव विविधता को संचालन की अधिक स्वतंत्रता मिलेगी।"
- (2) राजपरियन वन्यजीव अभयारण्य और इसके पारिस्थितिकी संवेदी जोन की सीमा का वर्णन **उपाबंध-I** के रूप में उपाबद्ध है।
- (3) सीमा विवरण और अक्षांश और देशांतर के साथ पारिस्थितिकी संवेदी जोन के राजपरियन वन्यजीव अभयारण्य का मानचित्र **उपाबंध-IIक, उपाबंध-IIख, उपाबंध-IIग, उपाबंध-IIघ, और उपाबंध-IIङ** के रूप में उपाबद्ध है।
- (4) पारिस्थितिकी संवेदी जोन और राजपरियन वन्यजीव अभयारण्य की सीमा के भू-निर्देशांकों की सूची **उपाबंध-III** के सारणी क और सारणी ख में दी गई है।
- (5) प्रस्तावित पारिस्थितिकी संवेदी जोन के अंतर्गत कोई ग्राम नहीं है।

2. पारिस्थितिकी संवेदी जोन के लिए आंचलिक महायोजना.-(1) संघ राज्य क्षेत्र सरकार, पारिस्थितिकी संवेदी जोन के प्रयोजनों के लिए, राजपत्र में इस अधिसूचना के प्रकाशन की तारीख से दो वर्ष की अवधि के भीतर, स्थानीय व्यक्तियों के

परामर्श से और इस अधिसूचना में दिए गए अनुबंधों का पालन करते हुए, संघ राज्य क्षेत्र सरकार के सक्षम प्राधिकारी के अनुमोदनार्थ एक आंचलिक महायोजना बनायेगी।

(2) संघ राज्य क्षेत्र सरकार द्वारा पारिस्थितिकी संवेदी जोन के लिए आंचलिक महायोजना ऐसी रीति से जो इस अधिसूचना में विनिर्दिष्ट किए गए हों के अनुसार तथा सुसंगत केंद्रीय और संघ राज्य क्षेत्र विधियों के अनुरूप तथा केंद्रीय सरकार द्वारा जारी मार्गनिर्देशों, यदि कोई हों, द्वारा तैयार होगी।

(3) आंचलिक महायोजना, उक्त योजना में पारिस्थितिकी और पर्यावरण संबंधी सरोकारों को समाकलित करने के लिए संघ राज्य क्षेत्र सरकार के निम्नलिखित विभागों के परामर्श से तैयार होगी, अर्थात्:-

- (i) पर्यावरण;
- (ii) वन;
- (iii) कृषि;
- (iv) राजस्व;
- (v) शहरी विकास;
- (vi) पर्यटन;
- (vii) ग्रामीण विकास;
- (viii) सिंचाई और बाढ़ नियंत्रण;
- (ix) जम्मू-कश्मीर संघ राज्य क्षेत्र प्रदूषण नियंत्रण बोर्ड;
- (x) नगरपालिका;
- (xi) पंचायती राज; और
- (xii) लोक निर्माण विभाग।

(4) आंचलिक महायोजना अनुमोदित विद्यमान भू-उपयोग, अवसंरचना और क्रियाकलापों पर कोई निर्बंधन अधिरोपित नहीं करेगी जब तक इस अधिसूचना में विनिर्दिष्ट न हो, तथा आंचलिक महायोजना में सभी अवसंरचनाओं और क्रियाकलापों में जो अधिक दक्षता और पारिस्थितिकी-अनुकूल हों का संवर्धन करेगी।

(5) आंचलिक महायोजना में अनाच्छादित क्षेत्रों की पुनः बहाली, विद्यमान जल निकायों के संरक्षण, आवाह क्षेत्रों के प्रबंधन, जल-संभरों के प्रबंधन, भू-जल के प्रबंधन, मृदा और नमी के संरक्षण, स्थानीय समुदायों की आवश्यकताओं तथा पारिस्थितिकी और पर्यावरण के ऐसे अन्य पहलुओं की व्यवस्था की जाएगी जिन पर ध्यान दिया जाना आवश्यक है।

(6) आंचलिक महायोजना में सभी विद्यमान पूजा स्थलों, ग्रामों और शहरी बस्तियों, वनों के प्रकार और किस्मों, कृषि क्षेत्रों, ऊपजाऊ भूमि, उद्यानों और उद्यानों की तरह के हरित क्षेत्रों, उद्यान कृषि क्षेत्रों, बगीचों, झीलों और अन्य जल निकायों का अभ्यंकन करेगी और इस में विद्यमान और प्रस्तावित भू- उपयोग की विशेषताओं का ब्यौरा देने वाले अनुसमर्थित मानचित्र भी दिए जाएंगे।

(7) आंचलिक महायोजना पारिस्थितिकी संवेदी जोन में विकास को विनियमित करेगी और सारणी में सूचीबद्ध पैरा-4 में प्रतिषिद्ध और विनियमित क्रियाकलापों का अनुपालन करेगी और स्थानीय समुदायों की जीविका को सुरक्षित करने के लिए पारिस्थितिकी अनुकूल विकास को सुनिश्चित और उसकी अभिवृद्धि भी करेगी।

(8) आंचलिक महायोजना, प्रादेशिक विकास योजना की सह-विस्तारी होगी।

(9) इस प्रकार अनुमोदित आंचलिक महायोजना इस अधिसूचना के उपबंधों के अनुसार मानीटरी के अपने कार्यों को करने के लिए एक संदर्भ दस्तावेज तैयार करेगी।

3. **संघ राज्य क्षेत्र सरकार द्वारा किए जाने वाले उपाय.-** संघ राज्य क्षेत्र सरकार इस अधिसूचना के उपबंधों को प्रभावी बनाने के लिए निम्नलिखित उपाय करेगी, अर्थात्:-

(1) **भू-उपयोग.-** (क) पारिस्थितिकी संवेदी जोन में वनों, उद्यान कृषि क्षेत्रों, कृषि क्षेत्रों, मनोरंजन के प्रयोजनों के लिए चिन्हित किए गए उद्यानों और खुले स्थानों का वाणिज्यिक या आवासीय या औद्योगिक क्रियाकलापों के लिए उपयोग या संपरिवर्तन नहीं किया जाएगा:

परन्तु पारिस्थितिकी संवेदी जोन के भीतर भाग (क), में विनिर्दिष्ट प्रयोजन से भिन्न प्रयोजन के लिए कृषि और अन्य भूमि का संपरिवर्तन, मानीटरी समिति की सिफारिश पर और सक्षम प्राधिकारी के पूर्व अनुमोदन से क्षेत्रीय नगर योजना अधिनियम तथा यथा-लागू केन्द्रीय सरकार या संघ राज्य क्षेत्र सरकार के अन्य नियमों और विनियमों के अधीन तथा इस अधिसूचना के उपबंधों के अनुसार स्थानीय निवासियों की निम्नलिखित आवासीय आवश्यकताओं को पूरा करने के लिए अनुज्ञात किया जाएगा:-

(i) विद्यमान सड़कों को चौड़ा करना और उन्हें सुदृढ़ करना और नई सड़कों का संनिर्माण;

(ii) बुनियादी ढांचों और नागरिक सुविधाओं का संनिर्माण और नवीकरण;

(iii) प्रदूषण उत्पन्न न करने वाले लघु उद्योग;

(iv) कुटीर उद्योगों जिनके अंतर्गत ग्रामीण उद्योग भी हैं; सुविधाजनक भंडार और स्थानीय सुविधाएं सहायक पारिस्थितिकी पर्यटन जिसके अंतर्गत ग्रहवास सम्मिलित है; और

(v) पैरा 4 के अधीन दिए गए संवर्धित क्रियाकलाप:

परन्तु यह और भी कि क्षेत्रीय नगर योजना अधिनियम के अधीन सक्षम प्राधिकारी के पूर्व अनुमोदन के बिना तथा संघ राज्य क्षेत्र सरकार के अन्य नियमों और विनियमों और संविधान के अनुच्छेद 244 के उपबंधों तथा तत्समय प्रवृत्त विधि, जिसके अंतर्गत अनुसूचित जनजाति और अन्य परंपरागत वन निवासी (वन अधिकारों की मान्यता) अधिनियम, 2006 (2007 का 2) भी आता है, का अनुपालन किए बिना वाणिज्यिक या औद्योगिक विकास क्रियाकलापों के लिए जनजातीय भूमि का उपयोग अनुज्ञात नहीं होगा:

परन्तु यह और भी कि पारिस्थितिकी संवेदी जोन के भीतर आने वाली भूमि के अभिलेखों में हुई किसी गलती को, मानीटरी समिति के विचार प्राप्त करने के पश्चात्, संघ राज्य क्षेत्र सरकार द्वारा प्रत्येक मामले में एक बार सुधारा जाएगा और उक्त गलती को सुधारने की सूचना केंद्रीय सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को दी जाएगी:

परन्तु यह और भी कि उपर्युक्त गलती को सुधारने में, इस उप-पैरा में यथा-उपबंधित के सिवाय, किसी भी दशा में भू-उपयोग का परिवर्तन सम्मिलित नहीं होगा;

(ख) अनुप्रयुक्त या अनुत्पादक कृषि क्षेत्रों में पुनः वनीकरण तथा पर्यावासों और जैव-विविधता की बहाली के प्रयास किए जाएंगे।

(2) **प्राकृतिक जल स्रोत.-** आंचलिक महायोजना में सभी प्राकृतिक जल स्रोतों के आवाह क्षेत्रों की पहचान की जाएगी और उनके संरक्षण और नवीकरण के लिए योजना सम्मिलित होगी और संघ राज्य क्षेत्र सरकार द्वारा ऐसे क्षेत्रों पर या उनके निकट विकास क्रियाकलापों प्रतिषिद्ध करने के बारे में जो ऐसे क्षेत्रों के लिए अहितकर हो ऐसी रीति से मार्गदर्शक सिद्धांत तैयार किए जाएंगे।

(3) **पर्यटन या पारिस्थितिकी पर्यटन.-** (क) पारिस्थितिकी संवेदी जोन के भीतर सभी नए पारिस्थितिकी पर्यटन क्रियाकलाप या विद्यमान पर्यटन क्रियाकलापों का विस्तार पर्यटन महायोजना के अनुसार पारिस्थितिकी संवेदी जोन के लिए होगा।

(ख) पारिस्थितिकी पर्यटन महायोजना संघ राज्य क्षेत्र के पर्यावरण और वन विभागों के परामर्श से पर्यटन विभाग द्वारा बनायी जाएगी।

(ग) पर्यटन महायोजना आंचलिक महायोजना का घटक होगी।

(घ) पर्यटन महायोजना पारिस्थितिकी संवेदी जोन की वहन क्षमता के आधार पर तैयार की जायेगी।

(ङ) पारिस्थितिकी पर्यटन संबंधी क्रियाकलाप निम्नानुसार विनियमित किए जाएंगे:-

(i) संरक्षित क्षेत्र की सीमा से एक किलोमीटर के भीतर या पारिस्थितिकी संवेदी जोन के विस्तार तक, इनमें जो भी अधिक निकट हो किसी होटलों या रिजॉर्ट का नया सन्निर्माण अनुज्ञात नहीं किया जाएगा:

परन्तु यह कि वन्यजीव अभयारण्य की सीमा से एक किलोमीटर की दूरी से परे पारिस्थितिकी संवेदी जोन के विस्तार तक होटलों और रिजॉर्ट का स्थापन केवल पूर्व परिभाषित और नामनिर्दिष्ट क्षेत्रों में पर्यटन महायोजना के अनुसार पारिस्थितिकी पर्यटन सुविधाओं के लिए ही अनुज्ञात होगा;

(ii) पारिस्थितिकी संवेदी जोन के भीतर सभी नए पर्यटन क्रिया-कलापों या विद्यमान पर्यटन क्रियाकलापों का विस्तार, केन्द्रीय सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा जारी मार्गदर्शक सिद्धांतों तथा पारिस्थितिकी पर्यटन, पारिस्थितिकी-शिक्षा और पारिस्थितिकी-विकास पर बल देने वाले राष्ट्रीय व्याघ्र संरक्षण प्राधिकरण द्वारा जारी पारिस्थितिकी पर्यटन संबंधी मार्गदर्शक सिद्धांतों (समय-समय पर यथा संशोधित) के अनुसार होगा;

(iii) आंचलिक महायोजना का अनुमोदन होने तक, पर्यटन के लिए विकास और विद्यमान पर्यटन क्रियाकलापों के विस्तार को वास्तविक स्थल-विनिर्दिष्ट संवीक्षा तथा मानीटरी समिति की सिफारिश के आधार पर संबंधित विनियामक प्राधिकरणों द्वारा अनुज्ञात किया जाएगा और पारिस्थितिकी संवेदी जोन के भीतर किसी नए होटल, रिजॉर्ट या वाणिज्यिक स्थापन का सन्निर्माण अनुज्ञात नहीं होगा।

(4) **प्राकृतिक विरासत.**— पारिस्थितिकी संवेदी जोन के अंतर्गत आने वाले बहुमूल्य प्राकृतिक विरासत के सभी स्थलों जैसे कि जीन कोश आरक्षित क्षेत्र, शैल विरचनाएं, जल प्रपातों, झरने, दर्रों, उपवनों, गुफाएं, स्थलों, वनपथ, रोहण मार्ग, उत्प्रपातों आदि की पहचान की जाएगी और उनकी सुरक्षा और संरक्षण के लिए आंचलिक महायोजना के भाग के रूप में एक विरासत संरक्षण योजना बनायी जाएगी।

(5) **मानव निर्मित विरासत स्थल.**— पारिस्थितिकी संवेदी जोन में भवनों, संरचनाओं, कलाकृति-क्षेत्रों तथा ऐतिहासिक, स्थापत्य संबंधी, सौंदर्यात्मक और सांस्कृतिक महत्व के क्षेत्रों की पहचान की जाएगी और उनके संरक्षण के लिए आंचलिक महायोजना के भाग के रूप में एक विरासत संरक्षण योजना बनायी जाएगी।

(6) **ध्वनि प्रदूषण.**— पर्यावरण अधिनियम के अधीन ध्वनि प्रदूषण (विनियमन और नियंत्रण) नियम, 2000 में नियत उपबंधों के अनुसार में पारिस्थितिकी-संवेदी जोन में ध्वनि प्रदूषण के नियंत्रण और निवारण का अनुपालन किया जाएगा।

(7) **वायु प्रदूषण.**— पारिस्थितिकी संवेदी जोन में, वायु प्रदूषण की निवारण और नियंत्रण, वायु (प्रदूषण निवारण और नियंत्रण) अधिनियम, 1981 (1981 का 14) के उपबंधों और उसके अधीन बनाए गए नियमों के अनुसार अनुपालन किया जाएगा।

(8) **बहिष्काव का निस्सारण.**— पारिस्थितिकी संवेदी जोन में उपचारित बहिष्काव का निस्सारण, और पर्यावरण अधिनियम अधीन बनाए गए नियमों के अन्तर्गत सम्मिलित किए गए पर्यावरणीय प्रदूषण के निस्सारण संबंधी साधारण मानकों या संघ राज्य क्षेत्र सरकार द्वारा नियत मानकों, इनमें जो भी अधिक कठोर हों, के अनुसार किया जाएगा।

(9) **ठोस अपशिष्ट.**— ठोस अपशिष्ट का निपटान और प्रबंधन निम्नानुसार किया जाएगा:-

(क) पारिस्थितिकी संवेदी जोन में ठोस अपशिष्ट का निपटान और प्रबंधन भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना सं. का.आ. 1357 (अ), तारीख 8 अप्रैल, 2016 के अधीन प्रकाशित

ठोस अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार किया जाएगा; अकार्बनिक पदार्थों का निपटान पारिस्थितिकी संवेदी जोन से बाहर चिन्हित किए गए स्थानों पर पर्यावरण-अनुकूल रीति से किया जाएगा;

(ख) पारिस्थितिकी संवेदी जोन में मान्य प्रौद्योगिकियों (स एमई ए) का प्रयोग करते हुए विद्यमान नियमों और विनियमों के अनुरूप ठोस अपशिष्ट का सुरक्षित और पर्यावरण-अनुकूल प्रबंधन अनुज्ञात किया जा सकेगा।

(10) जैव चिकित्सा अपशिष्ट का प्रबंधन.- जैव चिकित्सा अपशिष्ट का प्रबंधन निम्नानुसार किया जाएगा:-

(क) पारिस्थितिकी संवेदी जोन में जैव चिकित्सा अपशिष्ट का निपटान भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना सं.सा.का.नि. 343 (अ), तारीख 28 मार्च, 2016 द्वारा प्रकाशित जैव चिकित्सा अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार किया जाएगा।

(ख) पारिस्थितिकी संवेदी जोन में मान्य प्रौद्योगिकियों का उपयोग करते हुए विद्यमान नियमों और विनियमों के अनुरूप जैव-चिकित्सा अपशिष्ट का सुरक्षित और पर्यावरण-अनुकूल प्रबंधन अनुज्ञात किया जा सकेगा।

(11) प्लास्टिक अपशिष्ट का प्रबंधन.- पारिस्थितिकी संवेदी जोन में प्लास्टिक अपशिष्ट का प्रबंधन का निपटान भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की समय-समय पर यथा-संशोधित अधिसूचना संख्या सा.का.नि 340(अ), तारीख 18 मार्च, 2016 के द्वारा प्रकाशित प्लास्टिक अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार किया जाएगा।

(12) निर्माण और विध्वंस अपशिष्ट का प्रबंधन.- पारिस्थितिकी संवेदी जोन में निर्माण और विध्वंस अपशिष्ट का प्रबंधन का निपटान भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की समय-समय पर यथा-संशोधित अधिसूचना सं.सा.का.नि 317(अ), तारीख 29 मार्च, 2016 द्वारा प्रकाशित संनिर्माण और विध्वंस अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार किया जाएगा।

(13) ई-अपशिष्ट.- पारिस्थितिकी संवेदी जोन में ई-अपशिष्ट का प्रबंधन का निपटान भारत सरकार पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा प्रकाशित तथा समय-समय पर यथा-संशोधित ई-अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार किया जाएगा।

(14) यानीय-यातायात.- वाहन-यातायात का संचलन आवास-अनुकूल तरीके से विनियमित किया जाएगा और इस संबंध में आंचलिक महायोजना में विशेष उपबंध सम्मिलित किए जाएंगे तथा आंचलिक महायोजना के तैयार होने और संघ राज्य क्षेत्र सरकार के सक्षम प्राधिकारी द्वारा अनुमोदित किए जाने तक, मानीटरी समिति सुसंगत अधिनियमों और उनके अधीन बनाए गए नियमों और विनियमों के अनुसार वाहनों की आवाजाही के अनुपालन की मानीटरी करेगी।

(15) यानीय प्रदूषण.- यानीय प्रदूषण की रोकथाम और नियंत्रण लागू विधियों के अनुसार किया जाएगा और स्वच्छतर ईंधन के उपयोग के प्रयास किए जाएंगे।

(16) औद्योगिक ईकाइयां.- (i) राजपत्र में इस अधिसूचना के प्रकाशन पर या उसके पश्चात् पारिस्थितिकी संवेदी जोन में किसी नए प्रदूषणकारी उद्योग की स्थापना की अनुमति नहीं दी जाएगी।

(ii) जब तक इस अधिसूचना में विनिर्दिष्ट न हो, पारिस्थितिकी संवेदी जोन में केंद्रीय प्रदूषण नियंत्रण बोर्ड द्वारा फरवरी, 2016 में जारी मार्गदर्शक सिद्धांतों में किए गए उद्योगों के वर्गीकरण के अनुसार केवल गैर-प्रदूषणकारी उद्योगों की स्थापना अनुज्ञात होगी। इसके अतिरिक्त, गैर-प्रदूषणकारी कुटीर उद्योगों को बढ़ावा दिया जाएगा।

(17) पहाड़ी ढलानों का संरक्षण.- पहाड़ी ढलानों का संरक्षण निम्नानुसार किया जाएगा:-

(क) आंचलिक महायोजना में पहाड़ी ढलानों के उन क्षेत्रों को दर्शाया जाएगा जिनमें किसी भी संनिर्माण की अनुज्ञा नहीं होगी।

(ख) जिन ढलानों या विद्यमान खड़ी पहाड़ी ढलानों में अत्यधिक भू-क्षरण होता है उनमें किसी भी संनिर्माण की अनुमति नहीं दी जाएगी।

4. पारिस्थितिकी संवेदी जोन में प्रतिषिद्ध या विनियमित किए जाने वाले क्रियाकलापों की सूची:- पारिस्थितिकी संवेदी जोन में सभी क्रियाकलाप, पर्यावरण (संरक्षण) अधिनियम, और पर्यावरणीय समाघात निर्धारण अधिसूचना, 2006 सहित उसके अधीन बने नियमों और वन (संरक्षण) अधिनियम, 1980 (1980 का 69), भारतीय वन अधिनियम, 1927 (1927 का 16), वन्यजीव (संरक्षण) अधिनियम, 1972 (1972 का 53), सहित अन्य लागू नियमों तथा उनमें किए गए संशोधनों के अनुसार शासित होंगे और नीचे दी गई सारणी में विनिर्दिष्ट रीति से विनियमित होंगे, अर्थात्:-

सारणी

क्र. सं.	क्रियाकलाप	विवरण
(1)	(2)	(3)
अ. प्रतिषिद्ध क्रियाकलाप		
1.	वाणिज्यिक खनन, पत्थर उत्खनन और अपघर्षण इकाइयां।	(क) वास्तविक स्थानीय निवासियों की घरेलू आवश्यकताओं जिसमें निजी उपयोग के लिए मकानों के संनिर्माण या मरम्मत के लिए धरती को खोदना और मकान बनाने और व्यक्तिगत उपभोग के लिए देशी टाइल्स या ईंटों का निर्माण करना भी सम्मिलित है, के सिवाय सभी प्रकार के नए और विद्यमान खनन (लघु और वृहत खनिज), पत्थर की खानें और उनको तोड़ने की इकाइयां तत्काल प्रभाव से प्रतिषिद्ध होगा; (ख) खनन प्रचालन, माननीय उच्चतम न्यायालय की रिट याचिका (सिविल) सं. 1995 का 202 टी.एन. गौडाबर्मन थिरूमूलपाद बनाम भारत संघ के मामले में आदेश तारीख 4 अगस्त, 2006 और रिट याचिका (सी) सं. 2012 का 435 गोवा फाउंडेशन बनाम भारत संघ के मामले में तारीख 21 अप्रैल, 2014 के आदेश के अनुसरण में प्रचालन होगा।
2.	प्रदूषण (जल, वायु, मृदा, ध्वनि आदि) उत्पन्न करने वाले उद्योगों की स्थापना।	पारिस्थितिकी संवेदी जोन में कोई नया उद्योग लगाने और वर्तमान प्रदूषणकारी उद्योगों का विस्तार करने की अनुज्ञा नहीं होगी: परन्तु यह कि फरवरी, 2016 में केंद्रीय प्रदूषण नियंत्रण बोर्ड द्वारा जारी मार्गदर्शक सिद्धांतों में किए गए उद्योगों के वर्गीकरण के अनुसार जब तक, कि इस अधिसूचना में विनिर्दिष्ट न हो, पारिस्थितिकी संवेदी जोन में केवल गैर-प्रदूषणकारी उद्योगों की स्थापना होगी। इसके अतिरिक्त, गैर-प्रदूषणकारी कुटीर उद्योगों को बढ़ावा दिया जाएगा।
3.	वृहत जल विद्युत परियोजनाओं की स्थापना।	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) होंगे।
4.	किसी परिसंकटमय पदार्थों का उपयोग या उत्पादन या प्रसंस्करण।	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) होंगे।
5.	प्राकृतिक जल निकायों या भूमि क्षेत्र में अनुपचारित बहिस्त्रावों का निस्सारण।	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) होंगे।
6.	नई आरा मिलों की स्थापना।	पारिस्थितिकी संवेदी जोन में नई या विद्यमान आरा मिलों का विस्तार अनुज्ञात नहीं होगा।

7.	ईट भट्टों की स्थापना।	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) होंगे।
8.	जलावन लकड़ी का वाणिज्यिक उपयोग।	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) होंगे।
9.	पॉलिथीन बैग का उपयोग।	लागू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय) होंगे।
आ. विनियमित क्रियाकलाप		
10.	होटलों और रिजॉर्टों का वाणिज्यिक स्थापन।	<p>पारिस्थितिकी पर्यटन क्रियाकलापों हेतु लघु अस्थायी संरचनाओं के निर्माण के सिवाय, संरक्षित क्षेत्र की सीमा से एक किलोमीटर के भीतर या पारिस्थितिकी संवेदी जोन की विस्तार तक, इनमें जो भी निकट हो, नए वाणिज्यिक होटलों और रिजॉर्टों की स्थापना अनुज्ञात नहीं होगी:</p> <p>परंतु, संरक्षित क्षेत्र की सीमा से एक किलोमीटर बाहर या पारिस्थितिकी संवेदी जोन की विस्तार तक, इनमें जो भी निकट हो, सभी नए पर्यटन क्रियाकलाप करने या विद्यमान क्रियाकलापों का विस्तार पर्यटन महायोजना और यथालागू मार्गदर्शक सिद्धांतों के अनुसार होगा।</p>
11.	संनिर्माण क्रियाकलाप।	<p>(क) संरक्षित क्षेत्र की सीमा से एक किलोमीटर के भीतर या पारिस्थितिकी संवेदी जोन की विस्तार तक, इनमें जो भी निकट हो, किसी भी नये वाणिज्यिक संनिर्माण की अनुज्ञा नहीं होगी:</p> <p>परंतु स्थानीय लोगों को अपनी आवास सम्बन्धी निम्नलिखित आवश्यकताओं को पूरा करने के लिए, पैरा 3 के उप पैरा (1) में सूचीबद्ध क्रियाकलापों सहित अपने उपयोग के लिए, अपनी भूमि में भवन उप-विधियों के अनुसार, संनिर्माण करने की अनुज्ञा होगी।</p> <p>परन्तु यह और कि गैर-प्रदूषणकारी लघु उद्योगों से संबंधित संनिर्माण क्रियाकलाप लागू नियमों और विनियमों, यदि कोई हों, के अनुसार सक्षम प्राधिकारी की पूर्व अनुज्ञा से विनियमित किए जाएंगे और वे न्यूनतम होंगे।</p> <p>(ख) एक किलोमीटर से आगे ये आंचलिक महायोजना के अनुसार विनियमित होंगे।</p>
12.	गैर प्रदूषणकारी लघु उद्योग।	फरवरी, 2016 में केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा जारी उद्योगों के वर्गीकरण के अनुसार गैर-प्रदूषणकारी उद्योगों तथा पारिस्थितिकी संवेदी जोन से देशी सामग्रियों से उत्पाद बनाने वाले अपरिसंकटमय लघु और सेवा उद्योगों, कृषि, पुष्प कृषि, बागबानी या कृषि आधारित उद्योगों की स्थापना सक्षम प्राधिकारी द्वारा अनुज्ञात होगी।
13.	वृक्षों की कटाई।	<p>(क) संघ राज्य क्षेत्र सरकार के सक्षम प्राधिकारी की पूर्व अनुमति के बिना वन या सरकारी या राजस्व या निजी भूमि पर वृक्षों की कटाई की अनुज्ञा नहीं होगी।</p> <p>(ख) वृक्षों की कटाई केन्द्रीय या संबंधित संघ राज्य क्षेत्र के अधिनियमों और उनके अधीन बनाए गए नियमों के उपबंधों के अनुसार विनियमित होगी।</p>

14.	वन उत्पादों या गैर काष्ठ वन उत्पादों का संग्रह।	लागू विधियों के अनुसार विनियमित होगा।
15.	विद्युत और संचार टॉवरों का परिनिर्माण और तार-बिछाने तथा अन्य बुनियादी ढांचे की व्यवस्था।	लागू विधियों के अनुसार विनियमित होगा (भूमिगत केबल बिछाने को बढ़ावा दिया जाएगा)।
16.	नागरिक सुविधाओं सहित बुनियादी अवसंरचनाएं।	यह व्यवस्था लागू विधियों, नियमों, विनियमों और उपलब्ध दिशानिर्देशों के अनुसार उपशमन उपायों के साथ की जाएगी।
17.	विद्यमान सड़कों को चौड़ा करना, उन्हें सुदृढ़ बनाना और नई सड़कों का निर्माण करना।	यह व्यवस्था लागू विधियों, नियमों, विनियमों और उपलब्ध मार्गदर्शक सिद्धांतों के अनुसार उपशमन उपायों के साथ की जाएगी।
18.	पर्यटन से संबंधित अन्य क्रियाकलाप जैसे कि पारिस्थितिकी संवेदी जोन क्षेत्र के ऊपर से गर्म वायु के गुब्बारे, हेलीकाप्टर, ड्रोन, माइक्रोलाइट्स उड़ाना आदि।	लागू विधियों के अनुसार विनियमित होगा।
19.	पर्वतीय ढलानों और नदी तटों का संरक्षण।	लागू विधियों के अनुसार विनियमित होगा।
20.	रात्रि में यानीय यातायात का संचलन।	लागू विधियों के अनुसार वाणिज्यिक प्रयोजन के लिए विनियमित होगा।
21.	स्थानीय समुदायों द्वारा चल रही कृषि और बागवानी प्रथाओं के साथ डेयरियों, दुग्ध उत्पादन जल कृषि और मत्स्य पालन।	स्थानीय लोगों के उपयोग के लिए लागू विधियों के अधीन विनियमित होंगे।
22.	फार्मों, कारपोरेट, कंपनियों द्वारा बड़े पैमाने पर वाणिज्यिक पशुधन संपदा और कुक्कुट फार्मों की स्थापना।	स्थानीय आवश्यकताओं को पूरा करने के लिए लागू विधियों के अनुसार विनियमित (अन्यथा प्रदान किए गए) होंगे।
23.	प्राकृतिक जल निकायों या भू क्षेत्र में उपचारित अपशिष्ट जल या बहिर्स्राव का निस्सारण।	जल निकायों में उपचारित अपशिष्ट जल या बहिर्स्राव के निस्सारण से बचा जाएगा। उपचारित अपशिष्ट जल के पुनर्चक्रण और पुनः उपयोग के प्रयास किए जाएंगे अन्यथा उपचारित अपशिष्ट जल या बहिर्स्राव का निस्सारण लागू विधियों के अनुसार विनियमित होगा।
24.	सतही और भूजल का वाणिज्यिक निष्कर्षण।	लागू विधियों के अनुसार विनियमित होगा।
25.	ठोस अपशिष्ट प्रबंधन।	लागू विधियों के अनुसार विनियमित होगा।
26.	विदेशी प्रजातियों को लाना।	लागू विधियों के अनुसार विनियमित होगा।
27.	पारिस्थितिकी पर्यटन।	लागू विधियों के अनुसार विनियमित होगा।
28.	वाणिज्यिक संकेत बोर्ड और होर्डिंग का उपयोग।	लागू विधियों के अनुसार विनियमित होगा।
29.	ट्रेचिंग ग्राउंड।	नए ट्रेचिंग ग्राउंड की स्थापना प्रनिषिद्ध है। पुराने ट्रेचिंग ग्राउंड को लागू विधियों के अधीन विनियमित किया जाएगा।
30.	प्रवासी चरवाहे।	लागू विधियों के अधीन विनियमित होगा।
इ. संवर्धित क्रियाकलाप		
31.	वर्षा जल संचय।	सक्रिय रूप से बढ़ावा दिया जाएगा।
32.	जैविक खेती।	सक्रिय रूप से बढ़ावा दिया जाएगा।
33.	सभी क्रियाकलापों के लिए हरित	सक्रिय रूप से बढ़ावा दिया जाएगा।

	प्रौद्योगिकी का अंगीकरण ।	
34.	कुटीर उद्योग जिसके अंतर्गत ग्रामीण कारिगर भी है।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
35.	नवीकरणीय ऊर्जा और ईंधन का उपयोग ।	बायोगैस, सौर प्रकाश इत्यादि को सक्रिय रूप से बढ़ावा दिया जाएगा ।
36.	कृषि वानिकी ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
37.	बागान लगाना और औषधीय पौधों का रोपण ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
38.	पारिस्थितिकी अनुकूल यातायात का प्रयोग ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
39.	कौशल विकास ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
40.	अवक्रमित भूमि/वनों/ पर्यावासों की बहाली ।	
41.	पर्यावरण के प्रति जागरूकता।	सक्रिय रूप से बढ़ावा दिया जाएगा ।

5. पारिस्थितिकी संवेदी जोन अधिसूचना की मानीटरी के लिए मानीटरी समिति.- केंद्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (3) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, पारिस्थितिकी संवेदी जोन की प्रभावी मानीटरी के लिए मानीटरी समिति गठित करती है, जो निम्नलिखित से मिलकर बनेगी, अर्थात्:-

क्र. सं.	मानीटरी समिति का गठन	पद
(i)	कलेक्टर, अनंतनाग	अध्यक्ष, पदेन;
(ii)	क्षेत्रीय अधिकारी, जम्मू-कश्मीर संघ राज्य क्षेत्र प्रदूषण नियंत्रण बोर्ड	सदस्य;
(iii)	संघ राज्य क्षेत्र सरकार द्वारा नामनिर्दिष्ट किया जाने वाला वन्यजीव संरक्षण के क्षेत्र में काम करने वाला गैर-सरकारी संगठन का एक प्रतिनिधि	सदस्य;
(iv)	संघ राज्य क्षेत्र सरकार द्वारा नामनिर्दिष्ट जैव विविधता का एक विशेषज्ञ	सदस्य;
(v)	संघ राज्य क्षेत्र के प्रतिष्ठित संस्थान या विश्वविद्यालय से पारिस्थितिकी का एक विशेषज्ञ	सदस्य;
(vi)	प्रभागीय वन अधिकारी सह वन्यजीव वार्डन, दक्षिण कश्मीर अनंतनाग	सदस्य;
(vii)	वन्यजीव वार्डन, दक्षिण कश्मीर अनंतनाग	सदस्य सचिव।

6. निर्देश निबंधन:- (1) मानीटरी समिति इस अधिसूचना के उपबंधों के अनुपालन की मानीटरी करेगी।

(2) मानीटरी समिति का कार्यकाल तीन वर्ष तक या संघ राज्य क्षेत्र द्वारा नई समिति का पुनर्गठन किए जाने तक होगा और तत्पश्चात् मानीटरी समिति संघ राज्य क्षेत्र द्वारा गठित की जाएगी।

(3) उन क्रियाकलापों की, जो भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना संख्यांक का. आ. 1533(अ), तारीख 14 सितंबर, 2006 की अनुसूची में सम्मिलित हैं, और जो पारिस्थितिकी संवेदी जोन में आते हैं, सिवाय इसके पैरा 4 के अधीन सारणी में यथाविनिर्दिष्ट प्रतिषिद्ध क्रियाकलापों के मानीटरी समिति द्वारा वास्तविक विनिर्दिष्ट स्थलीय दशाओं के आधार पर संवीक्षा की जाएगी और उक्त अधिसूचना के उपबंधों के अधीन पूर्व पर्यावरण अनापत्ति के लिए केन्द्रीय सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को निर्दिष्ट किया जाएगा।

(4) उन क्रियाकलापों की, जो भारत के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना संख्यांक का.आ.1533(अ) 14 सितंबर, 2006 की अनुसूची में सम्मिलित नहीं है, और जो पारिस्थितिकी संवेदी जोन में आते हैं, सिवाय इसके पैरा 4 के अधीन सारणी में यथाविनिर्दिष्ट प्रतिषिद्ध क्रियाकलापों के, मानीटरी समिति द्वारा वास्तविक विनिर्दिष्ट स्थलीय दशाओं के आधार पर संवीक्षा की जाएगी और उसे संबद्ध विनियामक प्राधिकरणों को निर्दिष्ट किया जाएगा।

(5) मानीटरी समिति का सदस्य-सचिव या संबद्ध उपायुक्त या संबंधित उपायुक्त ऐसे व्यक्ति के विरुद्ध, जो इस अधिसूचना के किसी उपबंध का उल्लंघन करता है, पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 19 के अधीन परिवाद दायर करने के लिए सक्षम होगा।

(6) मानीटरी समिति मुद्दा दर मुद्दा के आधार पर अपेक्षाओं पर निर्भर रहते हुए संबद्ध विभागों के प्रतिनिधियों या विशेषज्ञों, औद्योगिक संगमो या संबद्ध पणधारियों के प्रतिनिधियों को, अपने विचार-विमर्श में सहायता के लिए आमंत्रित कर सकेगी।

(7) मानीटरी समिति प्रत्येक वर्ष की 31 मार्च तक के अपने क्रियाकलापों की वार्षिक कार्रवाई रिपोर्ट संघ राज्य क्षेत्र के मुख्य वन्यजीव वार्डन को, **उपाबंध-IV** में संलग्न प्रपत्र के अनुसार, उस वर्ष की 30 जून तक प्रस्तुत करेगी।

(8) केन्द्रीय सरकार का पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय मानीटरी समिति को उसके कृत्यों के प्रभावी निर्वहन के लिए ऐसे निदेश दे सकेगा जो वह उचित समझे।

7. इस अधिसूचना के उपबंधों को प्रभावी बनाने के लिए केन्द्रीय सरकार और संघ राज्य क्षेत्र सरकार, अतिरिक्त उपाय, यदि कोई हों, विनिर्दिष्ट कर सकेंगी।

8. इस अधिसूचना के उपबंध भारत के माननीय उच्चतम न्यायालय या उच्च न्यायालय या राष्ट्रीय हरित अधिकरण द्वारा पारित किए गए या पारित किए जाने वाले आदेश, यदि कोई हो, के अध्याधीन होंगे।

[फा.सं. 25/03/2019-ईएसजेड]

डॉ.सतीश चन्द्र गढ़कोटी, वैज्ञानिक 'जी'

उपाबंध-I

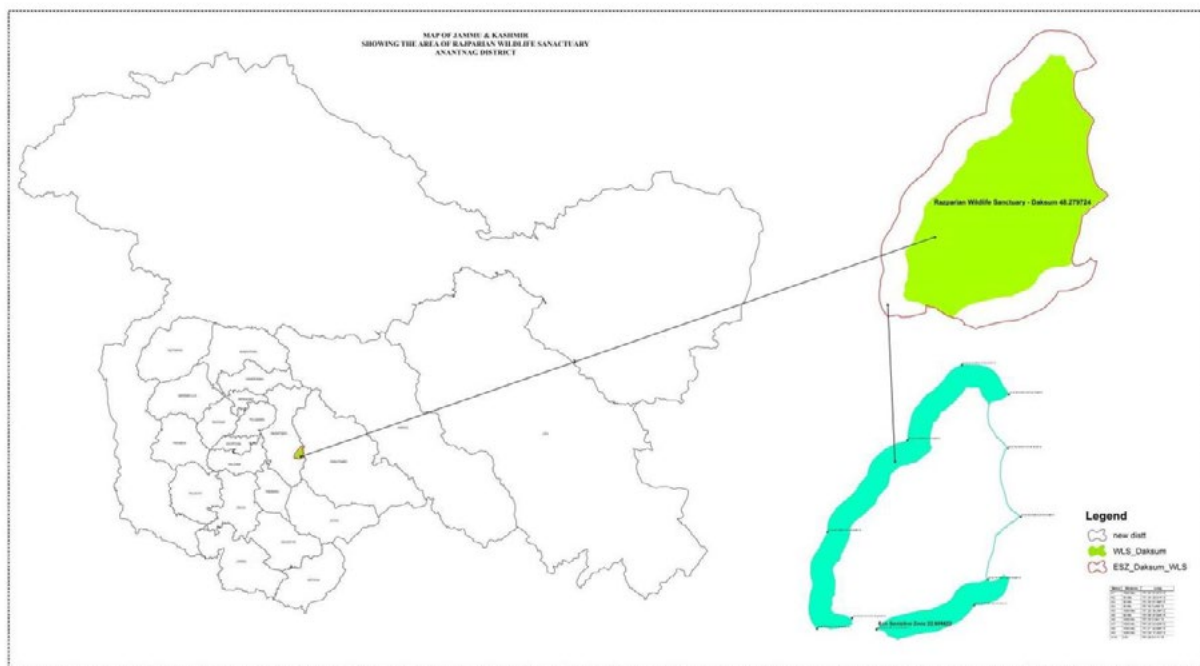
राजपरियन वन्यजीव अभयारण्य और इसके पारिस्थितिकी संवेदी जोन की सीमा का विवरण

क्र. सं.	दिशा डब्ल्यू. आर. टी सीमाओं अभयारण्य का	बिंदु	पारिस्थितिकी संवेदी जोन की सीमा से संरक्षित क्षेत्र (एम) की सीमा में दूरी	भू-निर्देशांक		टिप्पणियां
				अक्षांश	देशांतर	
1	उत्तर पूर्व	ए2	1000	उ 33°40'54.182"	पू 75°30'35.514"	अल्पाइन चारागाह, शिल्सर पास
2	पूर्व	ए 3	30	उ 33°39'15.486"	पू 75°30'57.485"	पीर पंजाल पास वाट नार, रास्ता बार
3	दक्षिण पूर्व	ए 4	30	उ 33°37'45.695"	पू 75°30'0.406"	पीरपंजाल वाट, वोगबलसर
4	दक्षिण	ए 6	1000	उ 33°36'35.538"	पू 75°25'5.481"	अल्पाइन चरागाह, राजपरियन नार

क्र. सं.	दिशा डब्ल्यू. आर. टी सीमाओं अभयारण्य का	बिन्दु	पारिस्थितिकी संवेदी जोन की सीमा से संरक्षित क्षेत्र (एम) की मीटर में दूरी	भू-निर्देशांक		टिप्पणियां
				अक्षांश	देशांतर	
5	पश्चिम	ए 7	1000	उ 33°38'54.901"	पू 75°25'24.056"	वोपालहक मार्ग
6	उत्तर पश्चिम	ए 8	1000	उ 33°41'6.639"	पू 75°27'42.689"	हरदालौ
7	उत्तर	ए 9	1000	उ 33°42'54.937"	पू 75°29'17.450"	अल्पाइन चारागाह, गांधीमाण्डु
8	दक्षिण पश्चिम	ए 10		उ 33°36'50.538"	पू 75°26'6.111"	

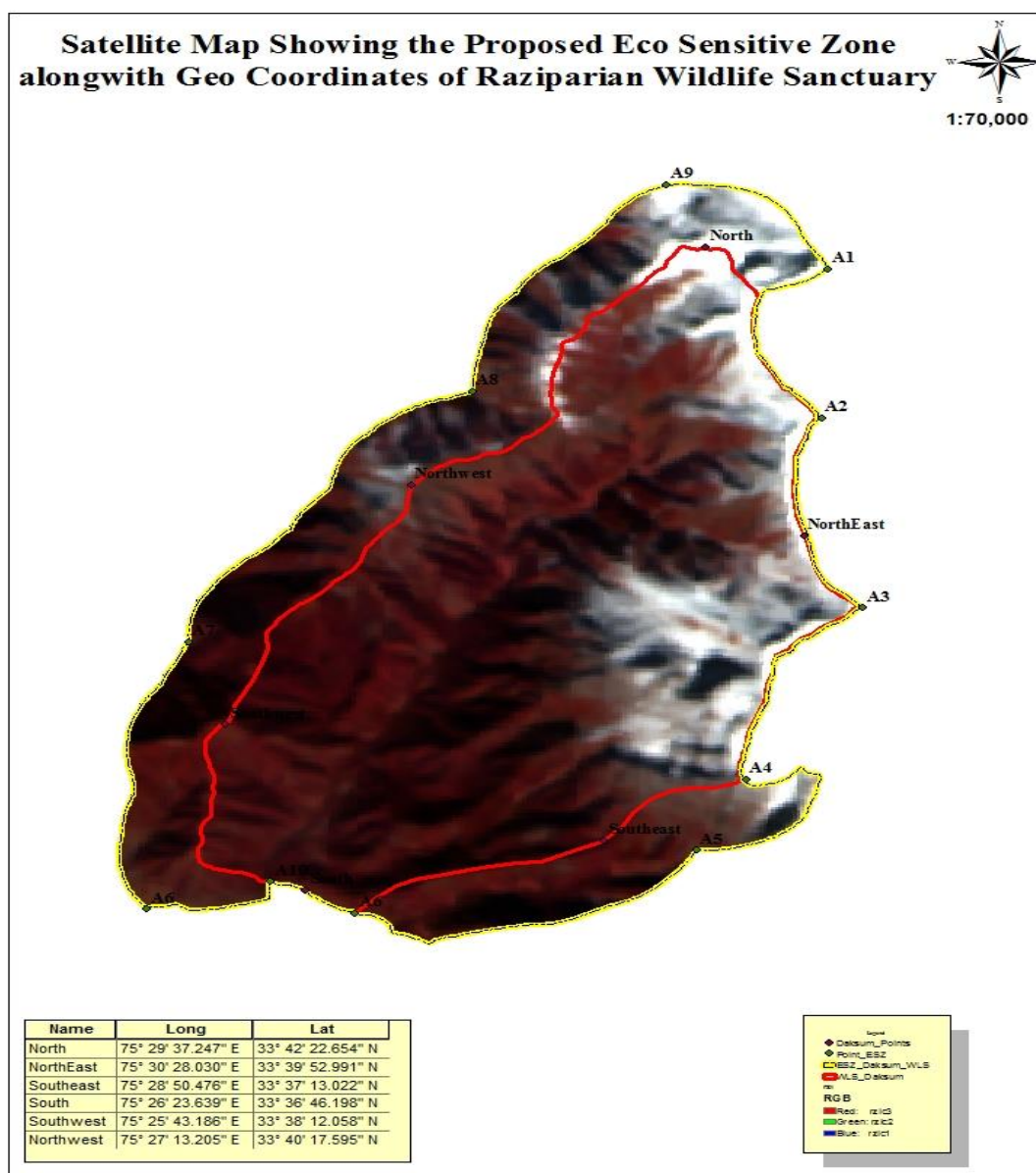
उपाबंध - IIक

मुख्य अवस्थानों के अक्षांश और देशांतर के साथ राजपरियन वन्यजीव अभयारण्य और इसके पारिस्थितिकी संवेदी जोन का अवस्थान मानचित्र



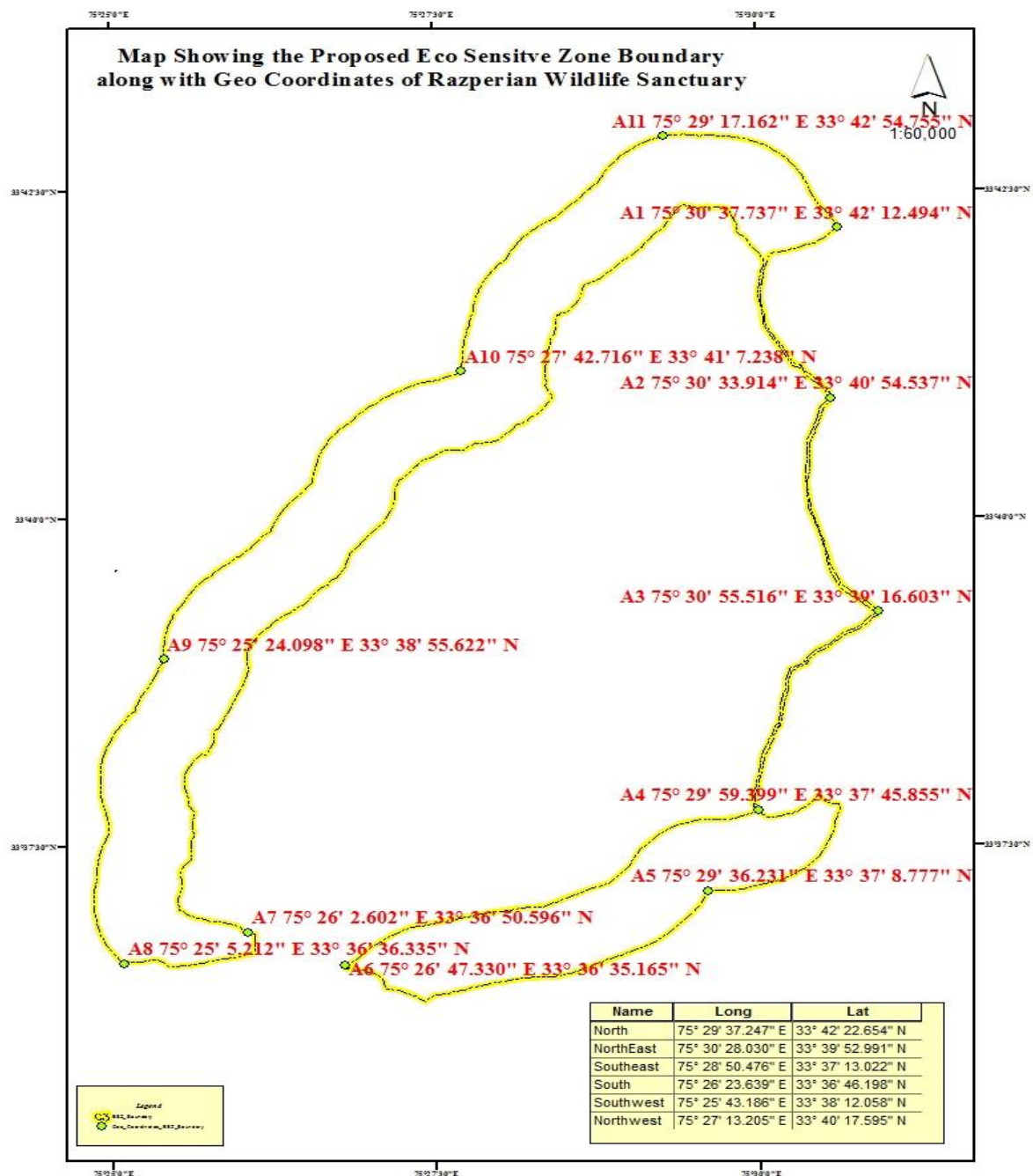
उपाबंध-II ख

मुख्य अवस्थानों के अक्षांश और देशांतर के साथ राजपरियन वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन का गूगल मानचित्र



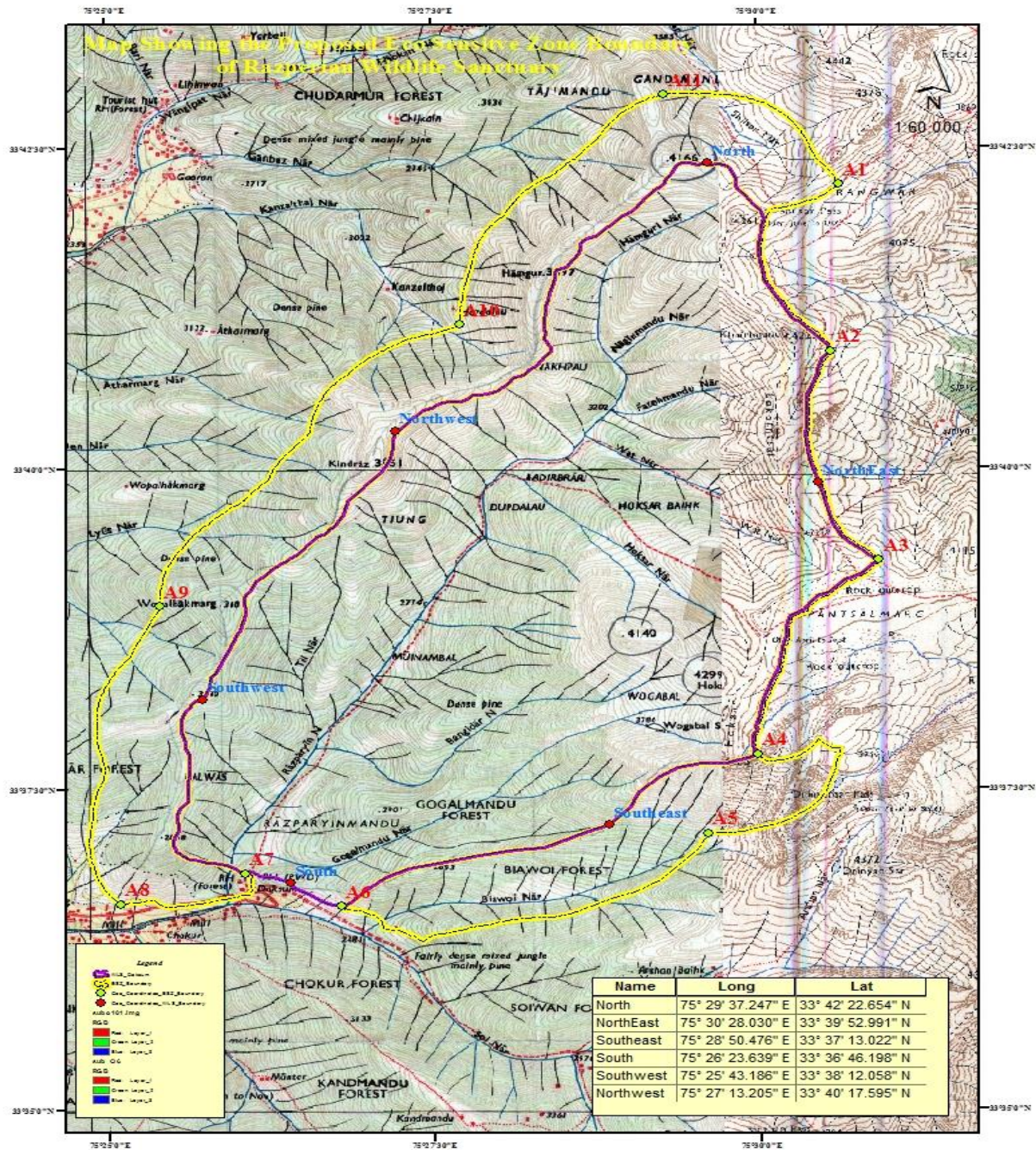
उपाबंध – IIग

मुख्य अवस्थानों के अक्षांश और देशांतर के साथ राजपरियन वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन का मानचित्र



उपाबंध – IIघ

मुख्य अवस्थानों के अक्षांश और देशांतर के साथ राजपरियन वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन को दर्शाने वाला मानचित्र



मुख्य अवस्थानों के अक्षांश और देशांतर के साथ राजपरियन वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन का मानचित्र



उपाबंध-III

सारणी क: राजपरियन वन्यजीव अभयारण्य के मुख्य अवस्थानों के भू-निर्देशांक

क्र. सं.	दिशा डब्ल्यू. आर. टी. अभयारण्य की सीमाएँ	भू-निर्देशांक	
		अक्षांश	देशांतर
1.	उत्तर	उ33°42'22.654"	पू 75°29'37.247"
2.	पूर्व	उ33°39'15.486"	पू 75°30'57.485"
3.	दक्षिण	उ33°36'34.283"	पू 75°26'47.949"
4.	पश्चिम	उ33°38'54.901"	पू 75°25'24.056"

सारणी ख: पारिस्थितिकी संवेदी जोन के मुख्य अवस्थानों के भू-निर्देशांक

क्र. सं.	दिशा डब्ल्यू. आर. टी. अभयारण्य की सीमाएँ	बिंदु	भू-निर्देशांक	
			अक्षांश	अक्षांश
1.	उत्तर पूर्व	ए2	उ33°40'54.182"	पू75°30'35.514"
2.	पूर्व	ए3	उ33°39'15.486"	पू75°30'57.485"
3.	दक्षिण पूर्व	ए4	उ33°37'45.695"	पू75°30'0.406"
4.	दक्षिण	ए6	उ33°36'35.538"	पू75°25'5.481"
5.	पश्चिम	ए7	उ33°38'54.901"	पू75°25'24.056"
6.	उत्तर पश्चिम	ए8	उ33°41'6.639"	पू75°27'42.689"
7.	उत्तर	ए9	उ33°42'54.937"	पू75°29'17.450"
8.	दक्षिण पश्चिम	ए10	उ33°36'50.538"	पू75°26'6.111"

उपाबंध-IV

की गई कार्रवाई सम्बन्धी रिपोर्ट का प्रपत्र.-

1. बैठकों की संख्या और तारीख ।
2. बैठकों का कार्यवृत्त : (कृपया मुख्य उल्लेखनीय बिंदुओं का वर्णन करें । बैठक के कार्यवृत्त को एक पृथक उपाबंध में प्रस्तुत करें) ।
3. पर्यटन महायोजना सहित आंचलिक महायोजना की तैयारी की स्थिति ।
4. भू-अभिलेखों की स्पष्ट त्रुटियों के सुधार के लिए निबटाए गए मामलों का सार (पारिस्थितिकी संवेदी जोन वार)। विवरण उपाबंध के रूप में संलग्न करें।
5. पर्यावरण समाघात निर्धारण अधिसूचना, 2006 के अधीन आने वाली क्रियाकलापों की संवीक्षा किए गए मामलों का सार । (विवरण एक पृथक उपाबंध के रूप में संलग्न करें) ।
6. पर्यावरण समाघात निर्धारण अधिसूचना, 2006 के अधीन न आने वाली क्रियाकलापों की संवीक्षा किए गए मामलों का सार । (विवरण एक पृथक उपाबंध के रूप में संलग्न करें) ।
7. पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 19 के अधीन दर्ज की गई शिकायतों का सार ।
8. कोई अन्य महत्वपूर्ण मामला ।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION

New Delhi, the 18th June, 2020

S.O. 1958(E).—WHEREAS, a draft notification was published in the Gazette of India, Extraordinary, *vide* notification of the Government of India in the Ministry of Environment, Forest and Climate Change number S.O. 3461 (E), dated the 23rd September, 2019, inviting objections and suggestions from all persons likely to be affected thereby within the period of sixty days from the date on which copies of the Gazette containing the said notification were made available to the public;

AND WHEREAS, copies of the Gazette containing the said draft notification were made available to the public on the 25th September, 2019;

AND WHEREAS, no objections and suggestions were received from persons and stakeholders in response to the draft notification;

AND WHEREAS, Rajparian Wildlife Sanctuary lies between 33°36'30" to 33°42'30"N and 75°25'30" to 75°31'15" E and is located about 90 kilometres away on the southern side of Srinagar city, in Anantnag District of the Kashmir Valley in the Union Territory of Jammu and Kashmir. The Sanctuary covers an area of 48.28 square kilometres;

AND WHEREAS, Rajparian Wildlife Sanctuary and its adjoining areas fall in the distribution range of important faunal species including musk deer (*Moschus moschiferus*), Himalayan brown bear (*Ursus arctos isabellinus*), Asiatic black bear (*Ursus thibetanus*) and common leopard (*Panthera pardus*), etc. The Sanctuary lies in the backdrop of the Daksum village, an important tourist destination of Kashmir. In order to maintain the sustainable tourism strategy in the area, it is imperative that the forests and adjoining areas are notified as an Eco-sensitive Zone. Further, a portion of the Sanctuary is currently occupied by a Sheep Breeding Farm owned by the Department of Sheep and Animal Husbandry. The presence of such farm right inside the Sanctuary poses a direct threat to the flora and fauna therein. The sheep farm uses a considerable chunk of the forest area as summer grazing ground, thereby posing a direct competition to the wild herbivores. Further, the threat of the communication of diseases from domestic sheep to wild fauna always looms large. With the declaration of the area as an Eco-sensitive Zone, this Sheep Breeding Farm has to be relocated from the present site;

AND WHEREAS, due to the variation in altitude, aspect and soil, diversity of vegetation is discernible in the tract. Four different categories of forest types exist in the Sanctuary. They may be classified as (a) Riverian Vegetation - this type of vegetation is mainly confined to the side of tributaries of the Rajparian Nallah near the Daksum up to Khatan Pathri. Some principally broad leaved genera such as *Aesculus indica*, *Juglans regia*, *Rubinia*, *morus*, *Quercus incana*, *Rhus succedanea*, *Celtis cavacasica*, *Prunus persica*, *Ulmus wallichiana*, *Corylus colurna*, *Padus cornuta*, etc. The shrubs dominating the ground cover include *Parrotiopsis jacquemontiana*, *Rosa* species interspersed with *Viburnum*, *Berberis* species, *Rubus*, *Aesculus indicus*, *Lonicera* and *Indigofera* species, *Demodeum*, *Jasmine* and *Isodon* too are existing in the area. (b) Coniferous Forests - it is an evergreen association of Kail (*Pinus graffithi*), a spruce (*Picea smithiana*) with other broad leaved species *Aesculus indica*, *Quercus incana* and Fir (*Abies pindrow*) communities confined to the steeply slopes of the Sanctuary. At heights, spruce (*Picea smithiana*) is found in association with *Pinus wallichiana*, *Heterantha* shrubs. In some place broad leaved species of Birch (*Betula utilis*) fairly mix up with Kail (*Pinus graffithi*) and spruce, besides *Soboriea tomentosa*, *Rosa* species, *Viburnum* species are found in association with them. (c) Alpine Pasture and Scrubs - mostly dominated by Birch (*Betula utilis*), unidentified grasses of glades, dotted at some places by spruce (*Picea smithiana*) with *Rhododendron*, *Companulatum*, *Rosa* and *Rubus* species, *Juniperus*, *Indigofera*, *Primula*, *Anemone*, *Myosotis* intercept at several places. (d) Rock Faces - the vegetation found in this area is confined mostly to the hilltops and gulleys called 'Nars' and is represented by coarse grasses, *Juniperus* species and *Rhododendron* species;

AND WHEREAS, the Western Himalayas are a store-house of medicinal and aromatic plants which are used in the pharmaceutical and perfume industries. The Rajparian Wildlife Sanctuary is blessed with numerous plant species of great medicinal value. Some medical plants growing wild in the area include *Aconitum heterophyllum*, *Arnebia benthamii*, *Artemisia absinthium*, *Berberis lycium*, *Datura stramonium*, *Dioscorea deltoidea*, *Lavatera cashmeriana*, *Saussurea costus* and *Taxus wallichiana*, etc;

AND WHEREAS, Rajparian Wildlife Sanctuary (Daksum) is the home of many common, rare and endangered mammalian species including musk deer (*Moschus moschiferus*), serow (*Capricornis sumatraensis*), Himalayan marmot (*Marmot himalayana*), Himalayan mouse-hare (*Ochotona seylii*), Kashmir flying squirrel (*Eoglaucomys fimbriatus*), Himalayan yellow throated martin (*Martes flavigula*), brown bear (*Ursus isabellinus*), Asiatic black bear (*Ursus thibetanus*), red fox (*Vulpus montana*), jackal (*Canis aureus*), small Indian mongoose (*Herpestes auropunctatus*), leopard (*Panthera pardus*), common gray langur (*Semnopithecus ajax*), Rhesus macaque (*Macaca mulatta*), snow leopard (*Panthera uncia*), etc. The major bird species found in the Sanctuary are black eared

kite (*Milvus migrans*), Himalayan griffon vulture (*Gyps himalayensis*), white backed vulture (*Pseudopus bengalensis*), monal (*Lophophorus impejanus*), Himalayan snow cock (*Tetraogallus Himalayensis*), chucker (*Alectoris chukar*), koklas (*Persia macrolopha*), blue rock pigeon (*Columba livia*), Himalayan rufus turtle dove (*Streptopelia orientalis*), ring dove (*S. decaota*), red turtle dove (*S. tranqubarica*), Asiatic cuckoo (*Cuculus saturatus*), alpine swift (*Tachymarptis melba*), Kashmir roller (*Crocias gasrullus semenwi*), common hoopoe (*Upupa epops*), Kashmiri woodpecker (*Trybatus himalayensis*), common swallow (*Hirundo rustica*), rufus backed shrike (*Lanius schach*), Eurasian golden oriole (*Oriolus oriolus*), Indian myna (*Acridotheres tristis*), large billed crow (*Corvus macrorhynchos*), large spotted nutcracker (*Nucifragemuhi punctata*), white checked bulbul (*Pycnonotus leucogenys*), streaked laughing thrush (*Trochalopteron lineatum*), Kashmir wren (*Troglodytes neglectus*), grey tit (*Parus major*), Kashmir house sparrow (*Passer domesticus*), etc;

AND WHEREAS, important rare, endangered and threatened species found in the Rajparian Wildlife Sanctuary are brown bear (Endangered), Kashmir musk deer (Endangered), common leopard (Vulnerable), snow leopard (Endangered), bearded vulture (Near Threatened), Kashmir flycatcher (Vulnerable), etc;

AND WHEREAS, it is necessary to conserve and protect the area, the extent and boundaries of Rajparian Wildlife Sanctuary which are specified in paragraph 1 as Eco-sensitive Zone from ecological, environmental and biodiversity point of view and to prohibit industries or class of industries and their operations and processes in the said Eco-sensitive Zone;

NOW, THEREFORE, in exercise of the powers conferred by sub-section (1) and clauses (v) and (xiv) of sub-section (2) and sub-section (3) of section 3 of the Environment (Protection) Act 1986 (29 of 1986) (hereafter in this notification referred to as the Environment Act) read with sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby notifies an area to an extent varying from 0 (zero) to 1 kilometre around the boundary of Rajparian Wildlife Sanctuary, in Anantnag district in the Union territory of Jammu and Kashmir as the Eco-sensitive Zone (hereafter in this notification referred to as the Eco-sensitive Zone) details of which are as under, namely: -

1. **Extent and boundaries of Eco-sensitive Zone.** – (1) The Eco-sensitive Zone shall be to an extent of 0 (zero) to 1 kilometre around the boundary of Rajparian Wildlife Sanctuary and the area of the Eco-sensitive Zone is 22.60 square kilometres. Zero extent of Eco-sensitive Zone was justified by the Union territory Government as “The Eco-sensitive zone proposed has been kept as zero falling on the Southern side at the entry for the reason that a geological boundary in the shape of Bringi Nallah already exists. Also the area falling from A1 to A4 in the annexed map has also been kept as zero extent Eco-sensitive Zone as the said portion falls in river Chenab watershed drainage in the Jammu Province, besides is naturally divided by natural cliffs at an altitudinal of more than 4000 meters (above sea levels) while as all around the Sanctuary existence of 30 meters to 1000 meters has been proposed as additional corridor of the sanctuary as Eco-sensitive Zone. The said area is mainly surrounded by the Forest area. This shall provide more freedom of movement to the wildlife and flourishing biodiversity in the area”.
- (2) The extent and boundary description of Rajparian Wildlife Sanctuary and its Eco-sensitive Zone is appended as **Annexure-I**.
- (3) The maps of the Rajparian Wildlife Sanctuary demarcating Eco-sensitive Zone along with boundary details and latitudes and longitudes are appended as **Annexure-IIA, Annexure-IIB, Annexure-IIC, Annexure-IID and Annexure-IIIE**.
- (4) List of geo-coordinates of the boundary of Rajparian Wildlife Sanctuary and Eco-sensitive Zone are given in Table A and Table B of **Annexure III**.
- (5) No villages falling within the proposed Eco-sensitive Zone.
2. **Zonal Master Plan for Eco-sensitive Zone.**– (1) The Union territory Government shall, for the purposes of the Eco-sensitive Zone prepare a Zonal Master Plan within a period of two years from the date of publication of this notification in the Official Gazette, in consultation with local people and adhering to the stipulations given in this notification for approval of the competent authority of Union territory.
- (2) The Zonal Master Plan for the Eco-sensitive Zone shall be prepared by the Union territory Government in such manner as is specified in this notification and also in consonance with the relevant Central and Union territory laws and the guidelines issued by the Central Government, if any.

- (3) The Zonal Master Plan shall be prepared in consultation with the following Departments of the Union territory Government, for integrating the ecological and environmental considerations into the said plan:-
- (i) Environment;
 - (ii) Forests;
 - (iii) Agriculture;
 - (iv) Revenue;
 - (v) Urban Development;
 - (vi) Tourism;
 - (vii) Rural Development;
 - (viii) Irrigation and Flood Control;
 - (ix) Jammu and Kashmir Union territory Pollution Control Board,
 - (x) Municipal;
 - (xi) Panchayati Raj; and
 - (xii) Public Works Department.
- (4) The Zonal Master Plan shall not impose any restriction on the approved existing land use, infrastructure and activities, unless so specified in this notification and the Zonal Master Plan shall factor in improvement of all infrastructure and activities to be more efficient and eco-friendly.
- (5) The Zonal Master Plan shall provide for restoration of denuded areas, conservation of existing water bodies, management of catchment areas, watershed management, groundwater management, soil and moisture conservation, needs of local community and such other aspects of the ecology and environment that need attention.
- (6) The Zonal Master Plan shall demarcate all the existing worshipping places, villages and urban settlements, types and kinds of forests, agricultural areas, fertile lands, green area, such as, parks and like places, horticultural areas, orchards, lakes and other water bodies with supporting maps giving details of existing and proposed land use features.
- (7) The Zonal Master Plan shall regulate development in Eco-sensitive Zone and adhere to prohibited and regulated activities listed in the Table in paragraph 4 and also ensure and promote eco-friendly development for security of local communities' livelihood.
- (8) The Zonal Master Plan shall be co-terminus with the Regional Development Plan.
- (9) The Zonal Master Plan so approved shall be the reference document for the Monitoring Committee for carrying out its functions of monitoring in accordance with the provisions of this notification.
- 3. Measures to be taken by the Union territory Government.-** The Union territory Government shall take the following measures for giving effect to the provisions of this notification, namely:-
- (1) **Land use.-** (a) Forests, horticulture areas, agricultural areas, parks and open spaces earmarked for recreational purposes in the Eco-sensitive Zone shall not be used or converted into areas for commercial or residential or industrial activities:

Provided that the conversion of agricultural and other lands, for the purposes other than that specified at part (a), within the Eco-sensitive Zone may be permitted on the recommendation of the Monitoring Committee, and with the prior approval of the competent authority under Regional Town Planning Act and other rules and regulations of Central Government or Union territory Government as applicable and *vide* provisions of this Notification, to meet the residential needs of the local residents and for activities such as:-

- (i) widening and strengthening of existing roads and construction of new roads;
- (ii) construction and renovation of infrastructure and civic amenities;
- (iii) small scale industries not causing pollution;
- (iv) cottage industries including village industries; convenience stores and local amenities supporting eco-tourism including home stay; and
- (v) promoted activities given under paragraph 4:

Provided further that no use of tribal land shall be permitted for commercial and industrial development activities without the prior approval of the competent authority under Regional Town Planning Act and other rules and regulations of the Union territory Government and without compliance of the provisions of article 244 of the Constitution or the law for the time being in force, including the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007):

Provided also that any error appearing in the land records within the Eco-sensitive Zone shall be corrected by the Union territory Government, after obtaining the views of Monitoring Committee, once in each case and the correction of said error shall be intimated to the Central Government in the Ministry of Environment, Forest and Climate Change:

Provided also that the correction of error shall not include change of land use in any case except as provided under this sub-paragraph.

(b) Efforts shall be made to reforest the unused or unproductive agricultural areas with afforestation and habitat restoration activities.

(2) **Natural water bodies.**—The catchment areas of all natural springs shall be identified and plans for their conservation and rejuvenation shall be incorporated in the Zonal Master Plan and the guidelines shall be drawn up by the Union territory Government in such a manner as to prohibit development activities at or near these areas which are detrimental to such areas.

(3) **Tourism or Eco-tourism.**— (a) All new eco-tourism activities or expansion of existing tourism activities within the Eco-sensitive Zone shall be as per the Tourism Master Plan for the Eco-sensitive Zone.

(b) The Eco-Tourism Master Plan shall be prepared by the Union territory Department of Tourism in consultation with Union territory Departments of Environment and Forests.

(c) The Tourism Master Plan shall form a component of the Zonal Master Plan.

(d) The Tourism Master Plan shall be drawn based on the study of carrying capacity of the Eco-sensitive Zone.

(e) The activities of eco-tourism shall be regulated as under, namely:—

(i) new construction of hotels and resorts shall not be allowed within one kilometre from the boundary of the protected area or upto the extent of the Eco-sensitive Zone whichever is nearer:

Provided that beyond the distance of one kilometre from the boundary of the protected area till the extent of the Eco-sensitive Zone, the establishment of new hotels and resorts shall be allowed only in pre-defined and designated areas for eco-tourism facilities as per Tourism Master Plan;

(ii) all new tourism activities or expansion of existing tourism activities within the Eco-sensitive Zone shall be in accordance with the guidelines issued by the Central Government in the Ministry of Environment, Forest and Climate Change and the eco-tourism guidelines issued by National Tiger Conservation Authority (as amended from time to time) with emphasis on eco-tourism, eco-education and eco-development;

(iii) until the Zonal Master Plan is approved, development for tourism and expansion of existing tourism activities shall be permitted by the concerned regulatory authorities based on the actual site specific scrutiny and recommendation of the Monitoring Committee and no new hotel, resort or commercial establishment construction shall be permitted within Eco-sensitive Zone area.

(4) **Natural heritage.**— All sites of valuable natural heritage in the Eco-sensitive Zone, such as the gene pool reserve areas, rock formations, waterfalls, springs, gorges, groves, caves, points, walks, rides, cliffs, etc. shall be identified and a heritage conservation plan shall be drawn up for their preservation and conservation as a part of the Zonal Master Plan.

(5) **Man-made heritage sites.**— Buildings, structures, artefacts, areas and precincts of historical, architectural, aesthetic, and cultural significance shall be identified in the Eco-sensitive Zone and heritage conservation plan for their conservation shall be prepared as part of the Zonal Master Plan.

(6) **Noise pollution.**— Prevention and control of noise pollution in the Eco-sensitive Zone shall be complied in accordance with the provisions of the Noise Pollution (Regulation and Control) Rules, 2000 under the Environment Act.

(7) **Air pollution.**— Prevention and control of air pollution in the Eco-sensitive Zone shall be complied in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the rules made thereunder.

(8) **Discharge of effluents.**— Discharge of treated effluent in Eco-sensitive Zone shall be in accordance with the provisions of the General Standards for Discharge of Environmental Pollutants covered under the

Environment Act and the rules made thereunder or standards stipulated by Union territory Government whichever is more stringent.

(9) Solid wastes.- Disposal and management of solid wastes shall be as under:-

- (a) the solid waste disposal and management in the Eco-sensitive Zone shall be carried out in accordance with the Solid Waste Management Rules, 2016, published by the Government of India in the Ministry of Environment, Forest and Climate Change *vide* notification number S.O. 1357 (E), dated the 8th April, 2016; the inorganic material may be disposed in an environmental acceptable manner at site identified outside the Eco-sensitive Zone;
- (b) safe and Environmentally Sound Management (ESM) of Solid wastes in conformity with the existing rules and regulations using identified technologies may be allowed within Eco-sensitive Zone.

(10) Bio-Medical Waste.- Bio Medical Waste Management shall be as under:-

- (a) the Bio-Medical Waste disposal in the Eco-sensitive Zone shall be carried out in accordance with the Bio-Medical Waste Management, Rules, 2016 published by the Government of India in the Ministry of Environment, Forest and Climate Change *vide* notification number G.S.R 343 (E), dated the 28th March, 2016.
- (b) safe and Environmentally Sound Management of Bio-Medical Wastes in conformity with the existing rules and regulations using identified technologies may be allowed within the Eco-sensitive Zone.

(11) Plastic Waste Management.- The plastic waste management in the Eco-sensitive Zone shall be carried out as per the provisions of the Plastic Waste Management Rules, 2016, published by the Government of India in the Ministry of Environment, Forest and Climate Change *vide* notification number G.S.R. 340(E), dated the 18th March, 2016, as amended from time to time.

(12) Construction and Demolition Waste Management.- The construction and demolition waste management in the Eco-sensitive Zone shall be carried out as per the provisions of the Construction and Demolition Waste Management Rules, 2016 published by the Government of India in the Ministry of Environment, Forest and Climate Change *vide* notification number G.S.R. 317(E), dated the 29th March, 2016, as amended from time to time.

(13) E-waste.- The E -Waste Management in the Eco-sensitive Zone shall be carried out as per the provisions of the E-Waste Management Rules, 2016, published by the Government of India in the Ministry of Environment, Forest and Climate Change, as amended from time to time.

(14) Vehicular traffic.- The vehicular movement of traffic shall be regulated in a habitat friendly manner and specific provisions in this regard shall be incorporated in the Zonal Master Plan and till such time as the Zonal Master plan is prepared and approved by the Competent Authority in the Union territory Government, the Monitoring Committee shall monitor compliance of vehicular movement under the relevant Acts and the rules and regulations made thereunder.

(15) Vehicular Pollution.- Prevention and control of vehicular pollution shall be in compliance with applicable laws and efforts shall be made for use of cleaner fuels.

(16) Industrial units.- (i) On or after the publication of this notification in the Official Gazette, no new polluting industries shall be permitted to be set up within the Eco-sensitive Zone.

- (ii) Only non-polluting industries shall be allowed within Eco-sensitive Zone as per the classification of Industries in the guidelines issued by the Central Pollution Control Board in February, 2016, unless so specified in this notification, and in addition, the non-polluting cottage industries shall be promoted.

(17) Protection of hill slopes.- The protection of hill slopes shall be as under:-

- (a) the Zonal Master Plan shall indicate areas on hill slopes where no construction shall be permitted;
- (b) construction on existing steep hill slopes or slopes with a high degree of erosion shall not be permitted.

4. List of activities prohibited or to be regulated within Eco-sensitive Zone.- All activities in the Eco sensitive Zone shall be governed by the provisions of the Environment Act and the rules made thereunder including the Environmental Impact Assessment Notification, 2006 and other applicable laws including the Forest (Conservation) Act, 1980 (69 of 1980), the Indian Forest Act, 1927 (16 of 1927), the Wildlife (Protection) Act 1972 (53 of 1972), and amendments made thereto and be regulated in the manner specified in the Table below, namely:-

TABLE

Sl. No. (1)	Activity (2)	Description (3)
A. Prohibited Activities		
1.	Commercial mining, stone quarrying and crushing units.	<p>(a) All new and existing mining (minor and major minerals), stone quarrying and crushing units are prohibited with immediate effect except for meeting the domestic needs of bona fide local residents including digging of earth for construction or repair of houses and for manufacture of country tiles or bricks for housing and for other activities;</p> <p>(b) The mining operations shall be carried out in accordance with the order of the Hon'ble Supreme Court dated the 4th August, 2006 in the matter of T.N. Godavarman Thirumulpad Vs. UOI in W.P.(C) No.202 of 1995 and dated the 21st April, 2014 in the matter of Goa Foundation Vs. UOI in W.P.(C) No.435 of 2012.</p>
2.	Setting of industries causing pollution (Water, Air, Soil, Noise, etc.).	<p>New industries and expansion of existing polluting industries in the Eco-sensitive Zone shall not be permitted:</p> <p>Provided that non-polluting industries shall be allowed within Eco-sensitive Zone as per classification of Industries in the guidelines issued by the Central Pollution Control Board in February, 2016, unless so specified in this notification and in addition the non-polluting cottage industries shall be promoted.</p>
3.	Establishment of major hydro-electric project.	Prohibited (except as otherwise provided) as per the applicable laws.
4.	Use or production or processing of any hazardous substances.	Prohibited (except as otherwise provided) as per the applicable laws.
5.	Discharge of untreated effluents in natural water bodies or land area.	Prohibited (except as otherwise provided) as per the applicable laws.
6.	Setting up of new saw mills.	New or expansion of existing saw mills shall not be permitted within the Eco-sensitive Zone.
7.	Setting up of brick kilns.	Prohibited (except as otherwise provided) as per the applicable laws.
8.	Commercial use of firewood.	Prohibited (except as otherwise provided) as per the applicable laws.
9.	Use of polythene bags.	Prohibited (except as otherwise provided) as per the applicable laws.
B. Regulated Activities		
10.	Commercial establishment of hotels and resorts.	<p>No new commercial hotels and resorts shall be permitted within one kilometer of the boundary of the protected area or upto the extent of Eco-sensitive Zone, whichever is nearer, except for small temporary structures for eco-tourism activities:</p> <p>Provided that, beyond one kilometer from the</p>

		boundary of the protected area or upto the extent of Eco-sensitive Zone whichever is nearer, all new tourist activities or expansion of existing activities shall be in conformity with the Tourism Master Plan and guidelines as applicable.
11.	Construction activities.	<p>(a) New commercial construction of any kind shall not be permitted within one kilometer from the boundary of the protected area or upto extent of the Eco-sensitive Zone, whichever is nearer:</p> <p>Provided that, local people shall be permitted to undertake construction in their land for their use including the activities mentioned in sub-paragraph (1) of paragraph 3 as per building bye-laws to meet the residential needs of the local residents:</p> <p>Provided further that the construction activity related to small scale industries not causing pollution shall be regulated and kept at the minimum, with the prior permission from the competent authority as per applicable rules and regulations, if any.</p> <p>(b) Beyond one kilometer it shall be regulated as per the Zonal Master Plan.</p>
12.	Small scale non polluting industries.	Non polluting industries as per classification of industries issued by the Central Pollution Control Board in February, 2016 and non-hazardous, small-scale and service industry, agriculture, floriculture, horticulture or agro-based industry producing products from indigenous materials from the Eco-sensitive Zone shall be permitted by the competent authority.
13.	Felling of trees.	<p>(a) There shall be no felling of trees in the forest or Government or revenue or private lands without prior permission of the competent authority in the Union territory Government.</p> <p>(b) The felling of trees shall be regulated in accordance with the provisions of the concerned Central or Union territory Act and the rules made thereunder.</p>
14.	Collection of Forest produce or Non-Timber Forest produce.	Regulated as per the applicable laws.
15.	Erection of electrical and communication towers and laying of cables and other infrastructures.	Regulated under applicable laws (underground cabling may be promoted).
16.	Infrastructure including civic amenities.	Taking measures of mitigation as per the applicable laws, rules and regulations available guidelines.
17.	Widening and strengthening of existing roads and construction of new roads.	Taking measures of mitigation as per the applicable laws, rules and regulation and available guidelines.
18.	Undertaking other activities related to tourism like flying over the Eco-sensitive Zone area by hot air balloon, helicopter, drones, Microlites, etc.	Regulated as per the applicable laws.
19.	Protection of hill slopes and river banks.	Regulated as per the applicable laws.

20.	Movement of vehicular traffic at night.	Regulated for commercial purpose under applicable laws.
21.	Ongoing agriculture and horticulture practices by local communities along with dairies, dairy farming, aquaculture and fisheries.	Permitted as per the applicable laws for use of locals.
22.	Establishment of large-scale commercial livestock and poultry farms by firms, corporate and companies.	Regulated (except otherwise provided) as per the applicable laws except for meeting local needs.
23.	Discharge of treated waste water or effluents in natural water bodies or land area.	The discharge of treated waste water or effluents shall be avoided to enter into the water bodies and efforts shall be made for recycle and reuse of treated waste water. Otherwise the discharge of treated waste water or effluent shall be regulated as per the applicable laws.
24.	Commercial extraction of surface and ground water.	Regulated as per the applicable laws.
25.	Solid waste management.	Regulated as per the applicable laws.
26.	Introduction of exotic species.	Regulated as per the applicable laws.
27.	Eco-tourism.	Regulated as per the applicable laws.
28.	Commercial sign boards and hoardings.	Regulated as per the applicable laws.
29.	Trenching ground.	Establishing of new trenching ground is prohibited. Old trenching grounds are to be regulated as per the applicable laws.
30.	Migratory graziers.	Regulated as per the applicable laws.
C. Promoted Activities		
31.	Rain water harvesting.	Shall be actively promoted.
32.	Organic farming.	Shall be actively promoted.
33.	Adoption of green technology for all activities.	Shall be actively promoted.
34.	Cottage industries including village artisans, etc.	Shall be actively promoted.
35.	Use of renewable energy and fuels.	Bio-gas, solar light etc. shall be actively promoted.
36.	Agro-Forestry.	Shall be actively promoted.
37.	Plantation of Horticulture and Herbals.	Shall be actively promoted.
38.	Use of eco-friendly transport.	Shall be actively promoted.
39.	Skill Development.	Shall be actively promoted.
40.	Restoration of degraded land/ forests/ habitat.	Shall be actively promoted.
41.	Environmental awareness.	Shall be actively promoted.

- 5. Monitoring Committee for Monitoring the Eco-sensitive Zone Notification.-** For effective monitoring of the provisions of this notification under sub-section (3) of section 3 of the Environment (Protection) Act, 1986, the Central Government hereby constitutes a Monitoring Committee, comprising of the following, namely:-

Sl. No.	Constituent of the Monitoring Committee	Designation
(i)	Collector, Anantnag	Chairman, ex officio
(ii)	Regional Officer, Jammu and Kashmir Union territory Pollution Control Board	Member;
(iii)	A representative of Non-governmental Organisation working in the field of wildlife conservation to be nominated by the Union territory Government	Member;
(iv)	An expert in Biodiversity nominated by the Union territory Government	Member;
(v)	One expert in Ecology from reputed institution or university of the Union territory	Member;
(vi)	Divisional Forest Officer cum Wildlife Warden, South Kashmir Anantnag	Member;
(vii)	Wildlife Warden, South Kashmir Anantnag	Member-Secretary.

6. Terms of reference. – (1) The Monitoring Committee shall monitor the compliance of the provisions of this notification.

- (1) The tenure of the Monitoring committee shall be for three years or till the re-constitution of the new Committee by the Union territory Government and subsequently the Monitoring Committee shall be constituted by the Union territory Government.
- (2) The activities that are covered in the Schedule to the notification of the Government of India in the erstwhile Ministry of Environment and Forests number S.O. 1533 (E), dated the 14th September, 2006, and are falling in the Eco-sensitive Zone, except for the prohibited activities as specified in the Table under paragraph 4 thereof, shall be scrutinised by the Monitoring Committee based on the actual site-specific conditions and referred to the Central Government in the Ministry of Environment, Forest and Climate Change for prior environmental clearances under the provisions of the said notification.
- (3) The activities that are not covered in the Schedule to the notification of the Government of India in the erstwhile Ministry of Environment and Forest number S.O. 1533 (E), dated the 14th September, 2006 and are falling in the Eco-sensitive Zone, except for the prohibited activities as specified in the Table under paragraph 4 thereof, shall be scrutinised by the Monitoring Committee based on the actual site-specific conditions and referred to the concerned regulatory authorities.
- (4) The Member-Secretary of the Monitoring Committee or the concerned Deputy Commissioner(s) shall be competent to file complaints under section 19 of the Environment Act, against any person who contravenes the provisions of this notification.
- (5) The Monitoring Committee may invite representatives or experts from concerned Departments, representatives from industry associations or concerned stakeholders to assist in its deliberations depending on the requirements on issue to issue basis.
- (6) The Monitoring Committee shall submit the annual action taken report of its activities as on the 31st March of every year by the 30th June of that year to the Chief Wildlife Warden in the Union territory as per proforma appended at Annexure IV.
- (7) The Central Government in the Ministry of Environment, Forest and Climate Change may give such directions, as it deems fit, to the Monitoring Committee for effective discharge of its functions.

7. The Central Government and Union territory Government may specify additional measures, if any, for giving effect to provisions of this notification.

8. The provisions of this notification shall be subject to the orders, if any passed or to be passed by the Hon'ble Supreme Court of India or High Court or the National Green Tribunal.

[F. No. 25/03/2019-ESZ]

DR. SATISH C. GARKOTI, Scientist 'G'

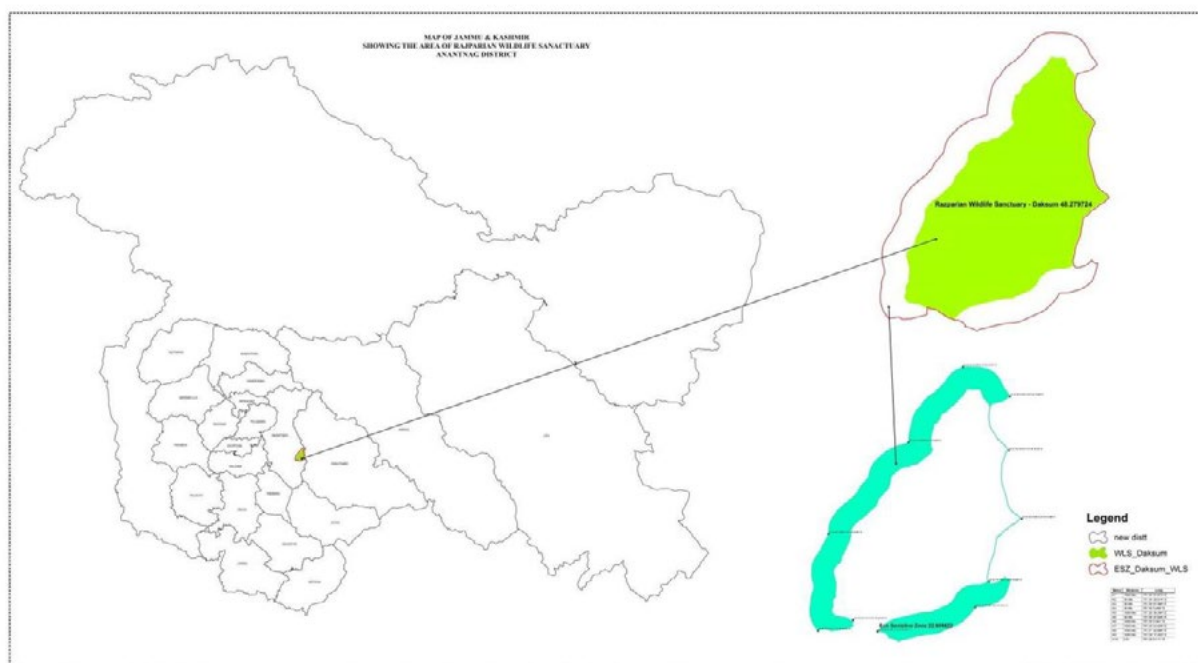
ANNEXURE- I

BOUNDARY DESCRIPTION OF RAJPARIAN WILDLIFE SANCTUARY AND ITS ECOSENSITIVE ZONE

Sl. No.	Direction w.r.t Boundaries of Sanctuary	Point	Distance in Meters of ESZ from Boundary of PA(M)	Geo-Coordinates		Remarks
				Latitude	Longitude	
1	North East	A2	1000	N33°40'54.182"	E75°30'35.514"	Alpine Pasture, Shilsar Pass
2	East	A3	30	N33°39'15.486"	E75°30'57.485"	Pirpanjal Pass, Wat Nar
3	South East	A4	30	N33°37'45.695"	E75°30'0.406"	PirPanjal Pass, WogabalSar
4	South	A6	1000	N33°36'35.538"	E75°25'5.481"	Alpine Pasture, Razparyin Nar
5	West	A7	1000	N33°38'54.901"	E75°25'24.056"	Wopalhakhmarg
6	North West	A8	1000	N33°41'6.639"	E75°27'42.689"	Hardalou
7	North	A9	1000	N33°42'54.937"	E75°29'17.450"	Alpine Pasture, Gandimandu
8	South West	A10		N33°36'50.538"	E75°26'6.111"	

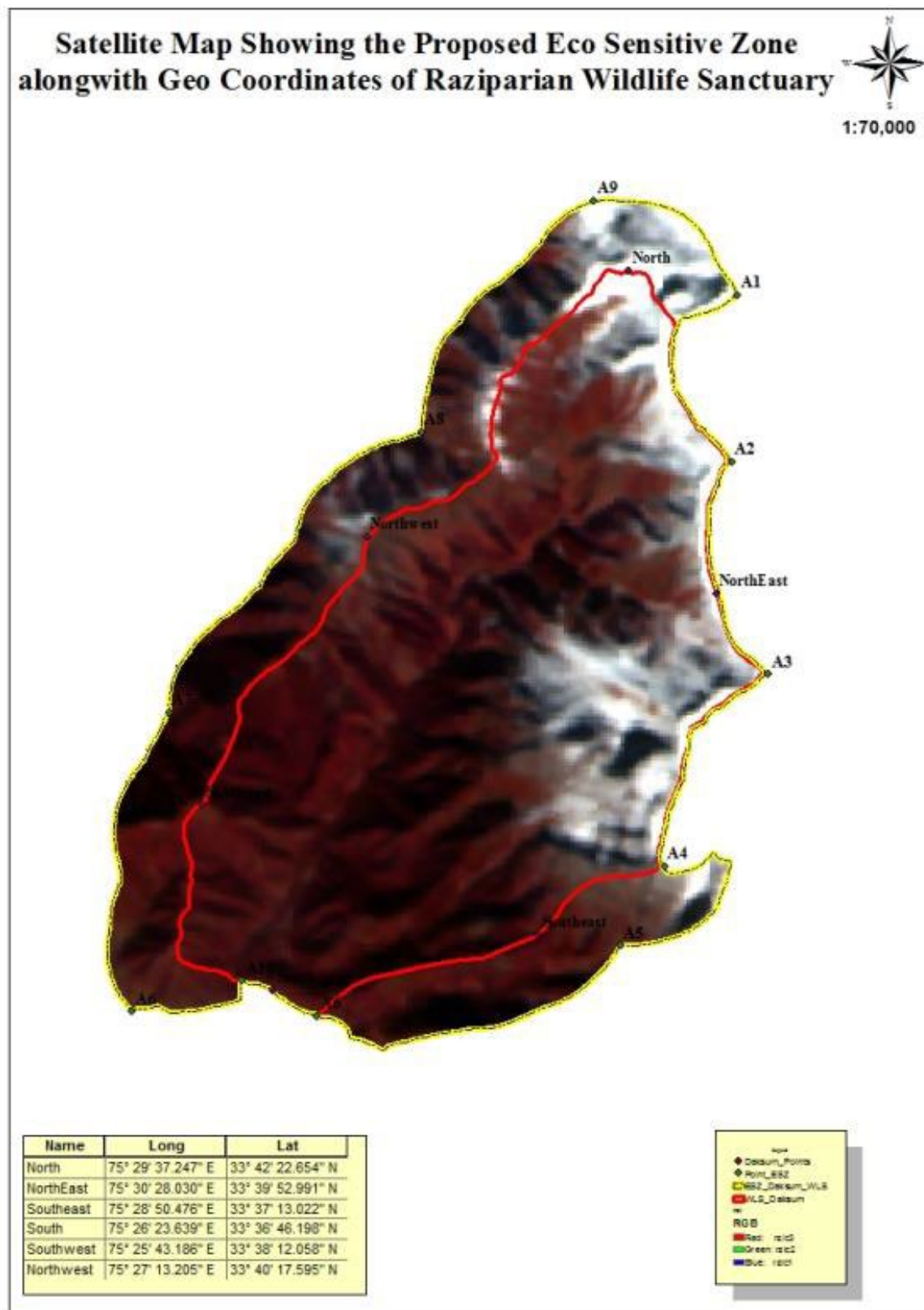
ANNEXURE- IIA

LOCATION MAP OF RAJPARIAN WILDLIFE SANCTUARY AND ITS ECO-SENSITIVE ZONE ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATIONS



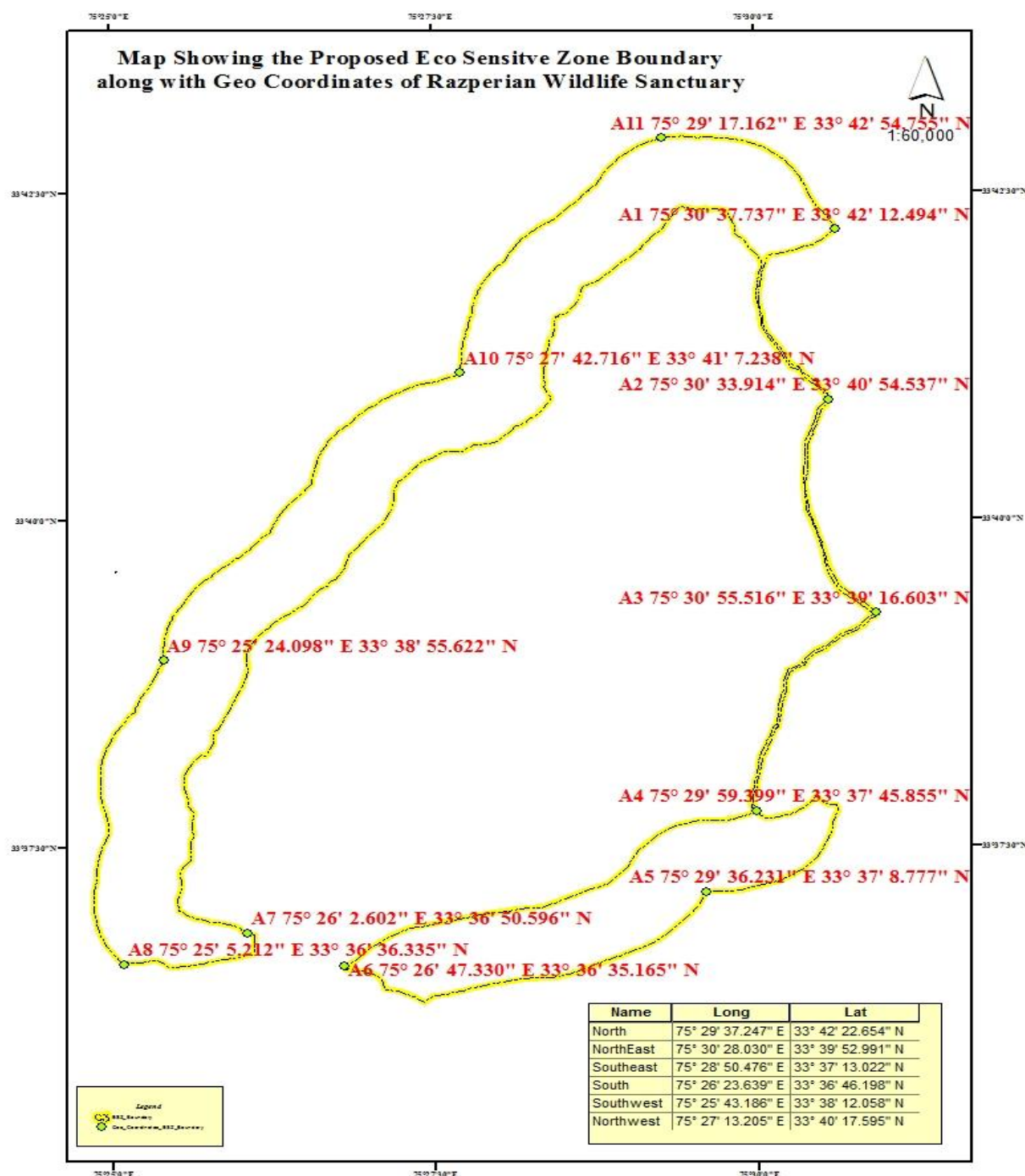
ANNEXURE- IIB

GOOGLE MAP OF ECO-SENSITIVE ZONE RAJPARIAN WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATIONS

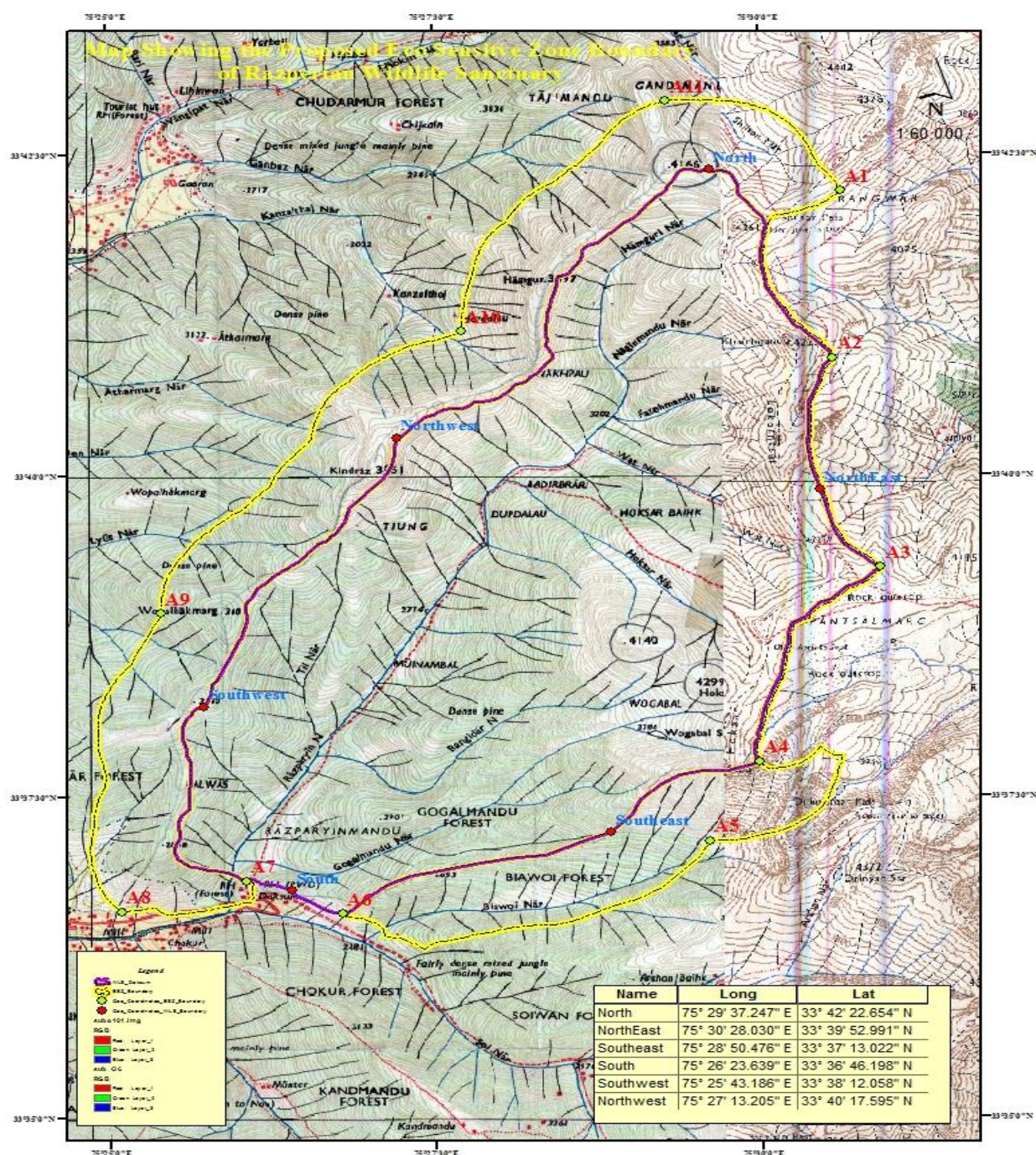


ANNEXURE-IIC

MAP OF ECO-SENSITIVE ZONE OF RAJPARIAN WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATIONS

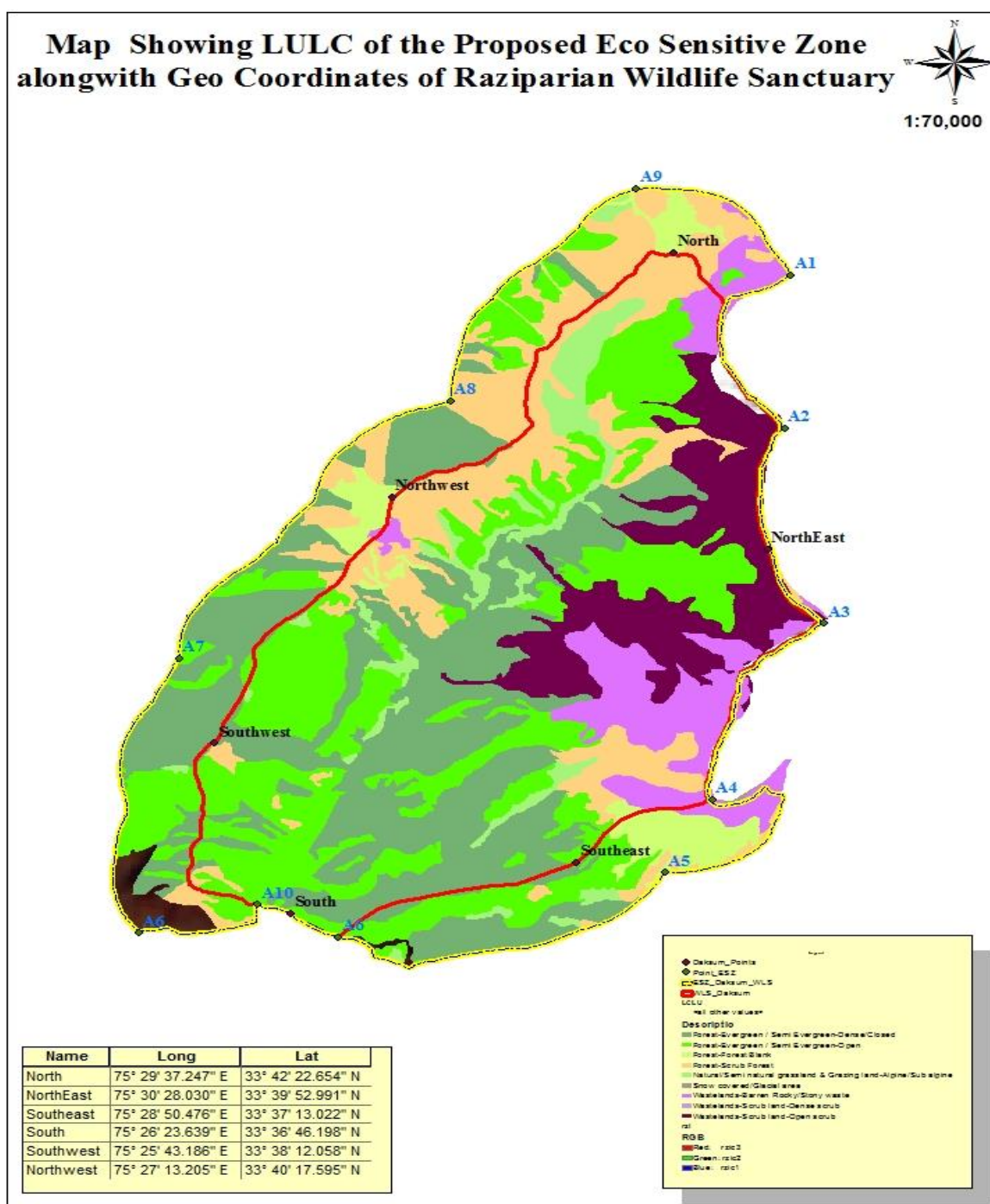


MAP OF RAJPARIAN WILDLIFE SANCTUARY SHOWING ECO-SENSITIVE ZONE OF ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATIONS



ANNEXURE- IIE

**LANDUSE MAP OF ECO-SENSITIVE ZONE OF RAJPARIAN WILDLIFE SANCTUARY ALONG WITH
LATITUDE AND LONGITUDE OF PROMINENT LOCATIONS**



ANNEXURE-III

TABLE A: GEO- COORDINATES OF PROMINENT LOCATIONS OF RAJPARIAN WILDLIFE SANCTUARY

Sl. No.	Direction w.r.t Boundaries of Sanctuary	Geo-Coordinates	
		Latitude	Longitude
1.	North	N33°42'22.654"	E75°29'37.247"
2.	East	N33°39'15.486"	E75°30'57.485"
3.	South	N33°36'34.283"	E75°26'47.949"
4.	West	N33°38'54.901"	E75°25'24.056"

TABLE B: GEO-COORDINATES OF PROMINENT LOCATIONS OF ECO-SENSITIVE ZONE

Sl. No.	Direction w.r.t Boundaries of Sanctuary	Point	Geo-Coordinates	
			Latitude	Longitude
1.	North East	A2	N33°40'54.182"	E75°30'35.514"
2.	East	A3	N33°39'15.486"	E75°30'57.485"
3.	South East	A4	N33°37'45.695"	E75°30'0.406"
4.	South	A6	N33°36'35.538"	E75°25'5.481"
5.	West	A7	N33°38'54.901"	E75°25'24.056"
6.	North West	A8	N33°41'6.639"	E75°27'42.689"
7.	North	A9	N33°42'54.937"	E75°29'17.450"
8.	South West	A10	N33°36'50.538"	E75°26'6.111"

ANNEXURE-IV

Performa of Action Taken Report:-

1. Number and date of meetings.
2. Minutes of the meetings: (mention noteworthy points. Attach minutes of the meeting as separate Annexure).
3. Status of preparation of Zonal Master Plan including Tourism Master Plan.
4. Summary of cases dealt with rectification of error apparent on face of land record (Eco-sensitive Zone wise). Details may be attached as Annexure.
5. Summary of cases scrutinised for activities covered under the Environment Impact Assessment Notification, 2006 (Details may be attached as separate Annexure).
6. Summary of cases scrutinised for activities not covered under the Environment Impact Assessment Notification, 2006 (Details may be attached as separate Annexure).
7. Summary of complaints lodged under section 19 of the Environment (Protection) Act, 1986.
8. Any other matter of importance.

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