Integrated Management Action Plan

KAZINAG
NATIONAL PARK

LIMBER,
WILDLIFE SANCTUARY

LACHIPORA
WILDLIFE SANCTUARY

&

NAGANARI
CONSERVATION RESERVE

2021-2031



Department of Wildlife Protection
North Division Sopore, Kashmir UT J&K



Department of Wildlife Protection
Jammu and Kashmir



Wildlife Trust of India

Team from WTI
Riyaz Ahmad, Samir Sinha, Rahul Kaul

Wildlife Protection Department:
Mohd Maqbool Baba

Photo Credits:

Jainy Maria
Shivang Mehta
Department of Wildlife Protection J&K

Print & Designed by **assciationedmedia.org**

Contents

Chapter-I	
1. Introduction to the area to the area	
1.1 Kazinag National Park	
1.2 Lachipora Wildlife Sanctuary	
1.3 Limber Wildlife Sanctuary	
1.4 Naganaree Conservation Reserve	
1.5 Siginificiance of the area.	
Chapter-2	
2.1 Boundaries of National Park	
2.2 Lachipora Wildlife Sanctuary	
2.3 Limber Wildlife Sanctuary	
2.4 Geology rock and soil	
2.5 Terrain drainage	
2.6 Climate	
2.7 Distribution of Wildlife and habitat Flora	
2.8 Flora	
2.9 Fauna	
Chapter-3	
History of management and present practices	
3.i History of management	
3.ii Forest Protection	
3.iii. Poaching and other illegal activities	
3.iv Wildife fires	
3.v Wildlife Health	
3.vi Illegal programmes and problems	
3.vii Eco-Tourism	
3.viii Research and Monitoring	
3.ix Training	
3.2 Present Management Practices	
3.2.i Adminstrative setup	
3.2.ii Habitat Management	
3.2.iii Protection	
3.2.iv Human Resources	
3.2.v Eco Development	
3.2.vi Eco-Tourism	
3.2.vii Research & Monitoring	
3.2.viii Communication	
3.2.ix Constreints to Management	
3.2.x Past works	
Chapter-4	
Present Management problems and Threats	
4.i Live stock grazing	
4.ii Non Timber Forest Produce Collection	
4.iii Poaching	
4.iv Forest Fires	
4.v Invosive and Weeds	
4.vi Mining	
4.vii Border fencing and insurgency	
4.viii Human Wildlife Conflict	
4.ix Disease Transmission	
4.x Human Resources	
Chapter 5	
Proposed Management Goal Objectivies & Management	
5.1 Vision	
5.2 Objectives	
5.3 Issues	
5.4 SWOT Analysis	
Chapter 6	
The Management Strategies	
Restorative Strategy	
Compensatory Strategy	
6.1 Boundaries	
6.2 Zonationa nd Theme Plans	
6.3 Habitat Management	
6.4 Pasture Development	
6.5.Removal of unwanted weeds	
6.6 Soil Conservation	
6.7 Plantation and Promoting Regeneration	
6.7a Plantation Requirement	
6.7b Afforestation	
6.7c. Deweeding	
6.7.d. Water holes	
6.7 e . Saltlics	
6.8. Demarcation and Fencing	
6.9 Control of Forest Fires	
6.10 Protection	
6.10 a Demarcation and securement	
6.10 b Wildlife Crime and prevention activities	
6.10 c Patrolling	
6.10 d . Antipoaching	
6.10 e Antigrazing	

Chapter-7	
Animal Health,Wildlife Management	
7.1 Disease investigation	
7.2Rescue and Rehibilation	
7.3 Feeding Management	
7.4 Practical Training work shop	
7.5 Transporation/Translocation of animals	
7.6 Diseases control in live stock	
7.7 Mobile Ambulance	
7.8 Other Activities	
Chapter-8	
Eco-Development	
8.1 Objectivies	
8.2 Establishment of Eco Development Committee	
8.3 Implementation	
8.4 Reduction on fire wood extraction	
8.5 Live stock vactination	
8.6 Conflict Reduction	
Chapter-9	
Eco-Tourism	
9.1 Eco Tourism Zonation	
9.2 Eco Tourism Plan	
9.3 Eco Tourisn Society	
Chapter-10	
Infrastructure Development	
10.1 Objectivies	
10.2 Infrastructure Development	
10.3 Communication Equipments	
10.4 Protect endemic Medicinal Plants	
Chapter-11	
Research and Monitoring	
11.1 Objectivies	
11.2 Monitoring of threatned species and Census	
11.3 Study on the impact of live stock grazing pressure on mountain ungulates	
11.4 Update information on major threats	
11.5 Mapping of resource use	
Chapter-12	
Extension and Awareness	
12.1 Objectivies	
12.2 Publicity material and installation of hoardings	
12.3 Observing Foundation Day	
12.4 Tours for School Children	
12.5 Awareness Work shop in local schools	
12.6 Awareness work shop for stake holders	
12.7 Nature Interpration Centre	
Chapter-13	
Man-Animal Conflict	
13.1 Objectivies	
13.2 Analysing Human Wild life Conflict	
13.3 Conflict mitigation activities	
13.4 Ex-gratia/Relief	
Chapter-14	
Budget	
Appendix	
I Check list of Birds	
II Check list of Animals	
111 Checklist of Butterfiles	
IV Critical habitat	
V Human-Animal Conflict	
VI Eco-Sensitive Zone	
VII Notification	
VIII. Forms	

सत्यमेव जयते



Suresh Kumar Gupta, IFS
Pr. Chief Conservator of Forests/
Chief Wildlife Warden
Jammu & Kashmir.

FOREWORD

Jammu and Kashmir, the northern most part of india, from time immemorial symbolizes a distinguished identity for cultural, social and environmental aspects. The culture of Jammu and Kashmir, as long the other parts of the region, has evolved over a very long period of time and environmental aspects of the territory has been thoroughly interwoven with the social facets. Ecology and socio-cultural aspects of the region are inseparable and thus both need special simultaneous attention for better development and fruitful planning.

The Pir Panjal and the Zanskar Himalayan Mountain ranges have separated the unique Kashmir Valley from rest of the Northern india and played a major role in shaping the ecological and socio-cultural identity of the jammu and Kashmir. Kazinag National Park along with Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary is the most important and the only Protected Area of the Kazinag Range and this area are recognized as one of the biodiversity rich areas of the region.

With fascinating biodiversity and endemism, kazinag National Park along with Limber & Lachipora Wildlife Sanctuary deserves special mention and adequate protection for the survival of the threatened charismatic wild goat species, the markhor besides inhabiting seven species of pheasants including our National bird of the J&K (Kaleeg) Burgeoning pressure of modern consumption centric life demands a delicate balance among the ecological, sociological and commercial drivers and that balancing act can lead to the long-term sustenance of the tremendous bio-diversity wealth of Kazinag National Park and adjoining areas of Kazinag range.

To achieve that holistic goal of long-term sustenance of ecosystem stability and simultaneous socio-economic development, a well designed pre-planned document is a pre-requisite. It is a matter of great pleasure to see this comprehensive document which codifies long-term conservation and management strategies for Kazinag National Park along with Limber & Lachipora Wildlife Sanctuary. I congratulate the authors and the team of Department of Wildlife Protection, Jammu and Kashmir and Wildlife Trust of India for their persistent effort to compile this document. I hope that this document with help the managers, scientists and policy-makers to achieve the long-term goal of Conservation and to ensure the survival of endangered flora and fauna of this beautiful landscape.

Suresh K Gupta (IFS)

सत्यमेव जयते

Rashid Y Naqash
Regional Wildlife Warden, Kashmir



PREFACE

Forest and game management in Jammu and Kashmir is not a new initiative, although the laws were exploitative in nature and were crude in the beginning, later clear cut distinctions between exploitation and protection were recognized. However poor infrastructure and meager manpower prevented the full implication of such management initiatives. The Kazinag National Park along with Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary falls under the Kathai Forests within the Baramulla Block within which scientific management of some forest areas was taken up in 1911. However, the forests of Uri and Kathai were not covered under any plan and therefore no systematic work was undertaken. Kazinag National Park & adjoining areas Limber & Lachipora, Naganari is the most important habitat for the Markhor (Capra falconeri falconeri) besides in habiting seven species of pheasants including National Bird of J&K(UT), the main population of markhor is distributed mostly across the Pir Panjal and the Kazinag mountain range is the best stronghold of markhor.

In the early part of the twentieth century, the forests of Uri and Kathai (the present area) were not covered under any plan and therefore no systematic work was undertaken. The first scientific working of these areas was undertaken under the Salaria's Plan (1930-1939) which was modified by J L Khushoo in 1939-40 and the plan was operational from 1941-1950. Thereafter, the plan was revised several times i.e. the Naqash Plan (1967-1977) and Zadoo (1980-1990). Compartments of the Kathai range, some of which were already a game reserve of the erstwhile maharaja of J&K were declared into three protected areas, namely the Lachipora Wildlife Sanctuary, the Limber Wildlife Sanctuary and the Naganari Conservation Reserve in 1987 providing for the first time in the area, protected refuge for wildlife. The major thrust of the conservation activities of the game reserve under the maharaja centered around the protection of game by deploying game guards and improvement of habitat by providing adequate water and food during crunch times and also natural food through plantation of fruit trees. Recently the core of these Sanctuaries was notified as Kazinag NP, which is interestingly very close to demarcation done by Maharaja for the game reserve.

The present management plan is aimed to protect and conserve the threatened and flagship species as well as to allow for some level of tourism in specific areas to develop so that some livelihoods are generated for locals. It is hoped that the present management plan would meet the requirements of all the stakeholders such as scientists, administrators and wildlife managers.

Rashid Y Naqash

ACKNOWLEDGEMENTS

We express our deep sense of gratitude to Shri Suresh Kumar Gupta IFS, Chief Wildlife Warden, Jammu & Kashmir for his valuable guidance and encouragement which were a driving force behind preparation of this integrated management plan for Kazinage National Park . We are extremely grateful to Shri Rashid Yahya Naqash, Regional Wildlife Warden, Kashmir for his constant support & advice during the entire period of formulation of this plan.

The team of experts and officers including Dr Harpreet Kour Special Secretary (Technical) Forest Deptt. Dr Khursheed Ahmad, Assistant Professor-cum-Scientist & Head, Division of Wildlife Sciences, SKUAST-Kashmir, Shri Irfan Ali Shah IFS, Conservator of Forests, Working Plan Circle and Dr. Sameena Charoo, Research Officer, Wildlife Protection Department involved in review of the drafts at various stages deserve special thanks for their painstaking efforts which were helpful in improving upon the draft and formulation.

We are highly thankful to Shri Sameer Dar, Researcher Wildlife Trust of India, for providing the valuable data from his study on nomadic herders in Kazinag National Park, Limber & Lachipora Wildlife Sanctuary and to Shri Tahir Ghazanfar from the same organization for his assistance in the field.

We also wish to thank the office staff of Wildlife Division, North, particularly Shri Ilyas Gaffar, Jr. Assistant and Shri Javaid Ahmad Kaloo, Shri Mrs Bali Kour for their assistance in extraction of data from office records. We are indebted to Shri Shabir Ahmad, I/c IT cell, Photo Interpretation Division, J&K Forest Department for preparation of digitized maps.

We are thankful to the front line staff of Kazinag National Park & its adjoining areas which gave valuable inputs to make a practical plan, Last but not the least, we wish to thank Shri Altaf Ahmad Koul (I/C Range Officer Baramulla), Mr Gh Nabi Baba(-Forester), Mr. Riyaz Ahmad (Forester) for their inputs , Late Mohd Akbar War(Field Asstt. WTI) gave important inputs based on his experience of working in the entire landscape of Kazinag for a long time, the local staff, Fayaz Ahmad Dar , Lateef Ahmad Mughal helped us in surveying the area.

Mohd Maqbool Baba
Wildlife Warden,
North Division Sopore

Dr Riyaz Ahmad
Project Head, WTI

Chapter 1

EXISTING SITUATION

Introduction to the area

From ecological perspectives, the importance of Jammu and Kashmir is tremendous as it holds an array of diverse habitats and wilderness areas which are home of many primitive as well as newly evolved taxa. The Kashmir valley has only about 3.8% of its area protected whereas Jammu region, has 4.22% area under protection (Kaul 2002). The two distinct bio-geographic zones viz. North-west Himalaya (2A) and Semi arid plains (4A) characterize the Jammu and Kashmir (Rodgers & Panwar 1988) with two National parks, 11 wildlife sanctuaries and 34 conservation reserves for preservation of wildlife. Kazinag NP Park is among the only one National Park with Limber& Lachipora in Baramulla district of Jammu and Kashmir.

Kazinag National Park

Name , location, Constitution and extent of the area

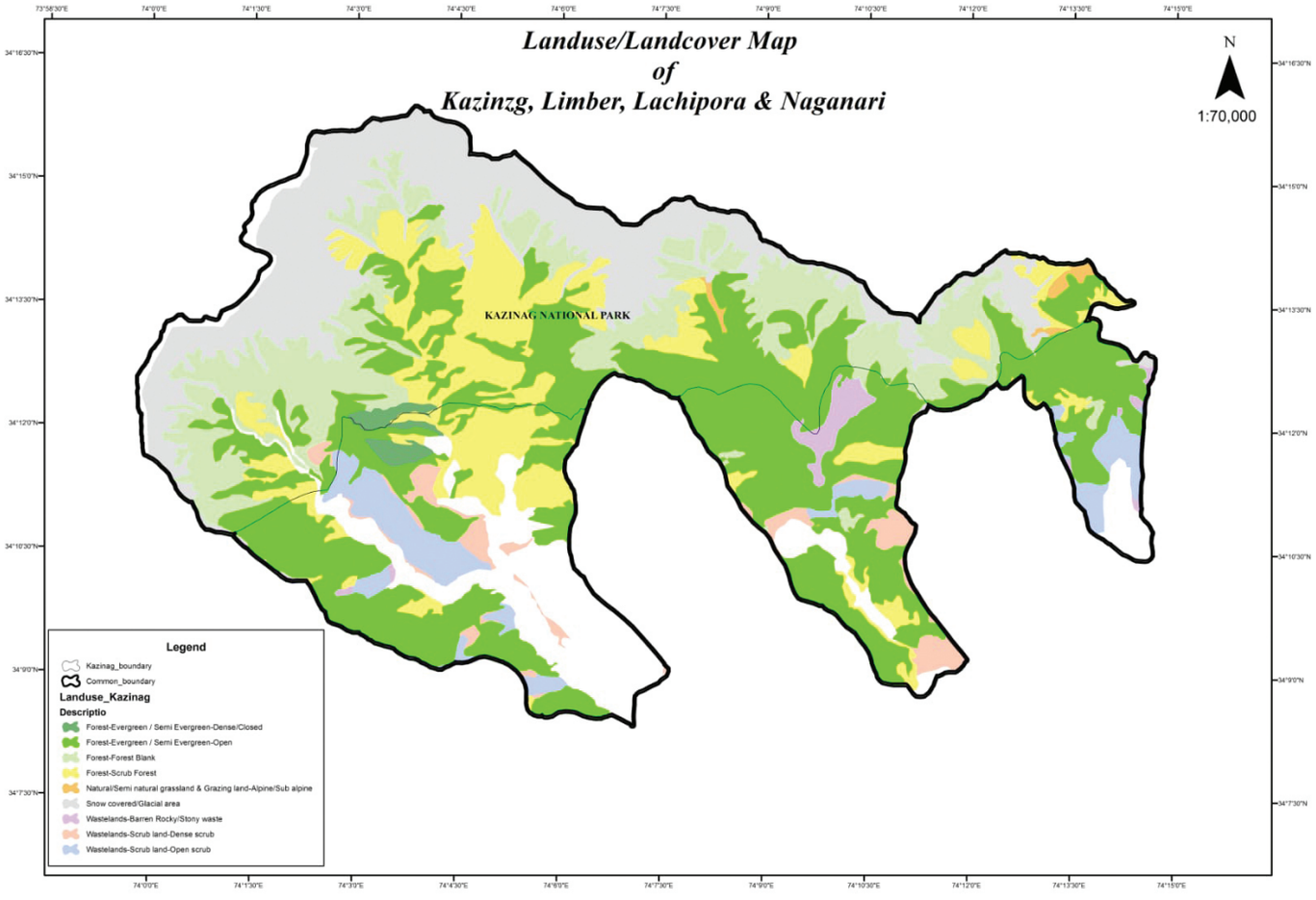
The Kazinag National Park holds the Kazinag range, which derives its name from the Kazinag spring which is situated at top of forest. The Kazinag range forms the the line of Control between India and Pakistan in Handwara Tehsil and has a height of 15524 feet. It usually remains snow clad most of the year. On the top it stands the historical kazinag spring and Satkohl Nag which have been providing water to Kehmil, Puhru, Mawar and Talar rivers of the district and some of the water goes to Pakistan through Nowkote. The Kazinag National Park is located in Baramulla district of Jammu and Kashmir and lies between 34° 11′ to 34° 16′N and 74° 0′ to 71° 15′ E. The total area of the park (Table 1.1) is about 90.86 Km2. The park came in existence under notification **order No SRO 425 Dated 18th of Dec, 2007** under the provisions of the Jammu and Kashmir Wildlife Protection Act,1978. The National Park was formed by adding higher elevations of the three existing protected areas of Lachipora WLS, Limber WLS & Naganari Conservation Area (Figure 1.1). Before being amalgamated into a single unit, these three areas were managed by the Department of Wildlife Protection (DWP) J&K Government. Prior to these areas being declared Wildlife protected areas, they were knownas sporting grounds (Shikargah) of the erstwhile Maharaja Hari Singh, the ruler of Jammu and Kashmir. To ensure the availability if sufficient game for himself, the Maharaja had enforced very strict game rules. The game guards were employed for patrolling the area. The laws governed in all his game reserves or Rakhs, where hunting was controlled and permitted seasonally (reviewed in Baba 2005). The detailed information on location, area and altitudinal ranges of Kazinag National Park is as below

Protected Area	Latitude	Longitude	Altitude	Area(km2)
				Range(m)
Kazinag NP	**34°11′ to 34°16**	**74°00′ to 74°15**	**3200-4212**	**90.86**

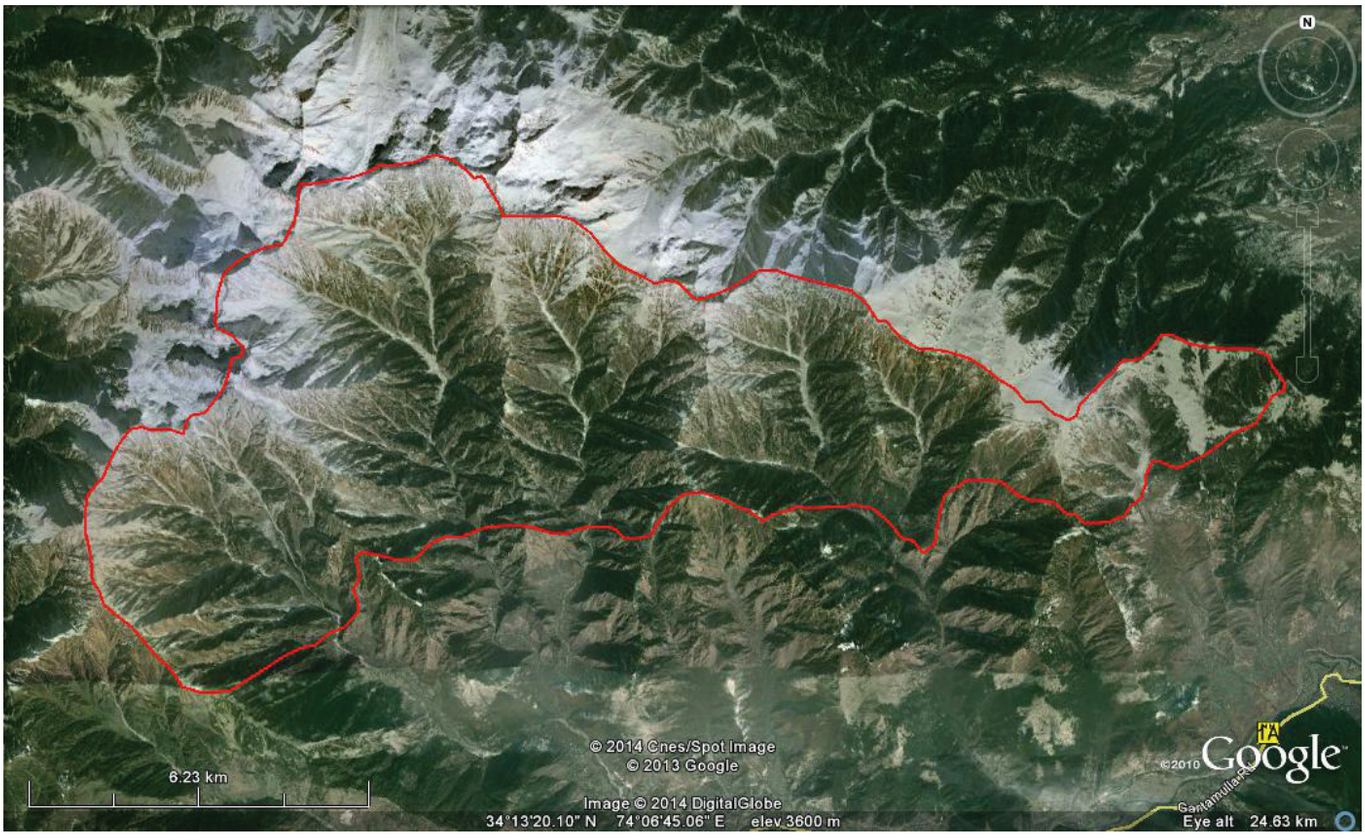
The Kazinag spring is least explored hence data on ecology of Kazinag Spring and hydrology is not available.

Approach and Access:

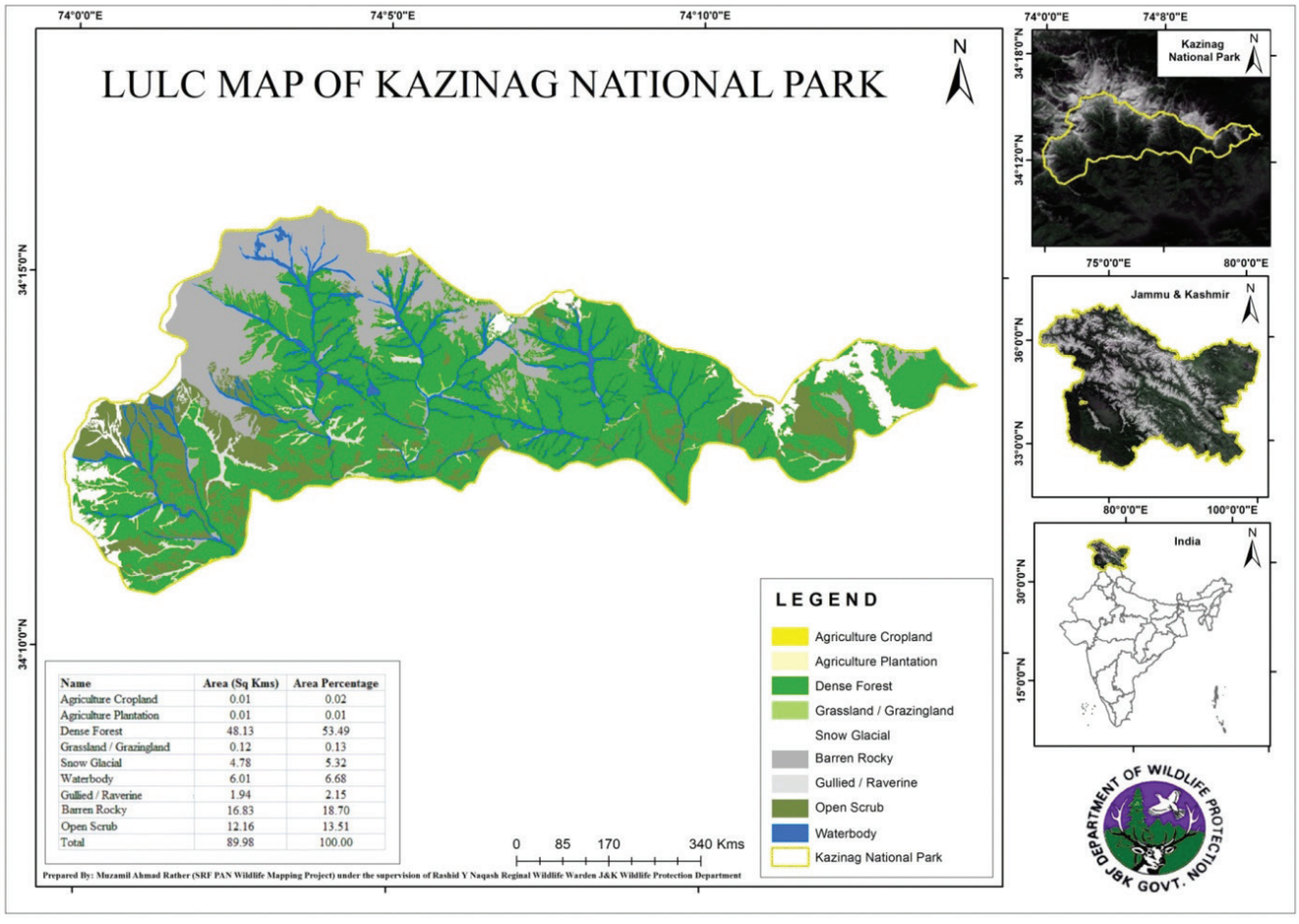
The National park being mountainous has some jeepable roads allowing access to the base of the mountains. Thereafter a network of trails and bridle paths allows access to most areas of the Sanctuary. However certain parts of the park are steep and access is tough. Being very close to the LoC, some areas, especially towards to the west (Lachipora) may be out of bounds due to security reasons.



Location of Kazinag National Park in Jammu and Kashmir



A satellite image of Kazinag National Park



Name	Area (Sq Kms)	Area Percentage
Agriculture Cropland	0.01	0.02
Agriculture Plantation	0.01	0.01
Dense Forest	48.13	53.49
Grassland / Grazingland	0.12	0.13
Snow Glacial	4.78	5.32
Waterbody	6.01	6.68
Gullied / Raverine	1.94	2.15
Barren Rocky	16.83	18.70
Open Scrub	12.16	13.51
Total	89.98	100.00

Habitats of Kazinag



Lachipora Wildlife Sanctuary

1.2 Name , location, Constitution and extent of the area

The Lachipora Wildlife sanctuary lies between 34° 07′ to 34° 14′N and 74° 0′ to 74° 06′ E. The total area of the sanctuary is about 27.77 Km2. The sanctuary came in existence under notification **order No SRO 150 Dated 19th March ,1987** under the provisions of the Jammu and Kashmir Wildlife Protection Act,1978. Lachipora was transferred to the DWP only recently. Prior to this area being declared Wildlife Sanctuaries,

The detailed information on location, area and altitudinal ranges of Lachipora Wildlife Sanctuary is as below:

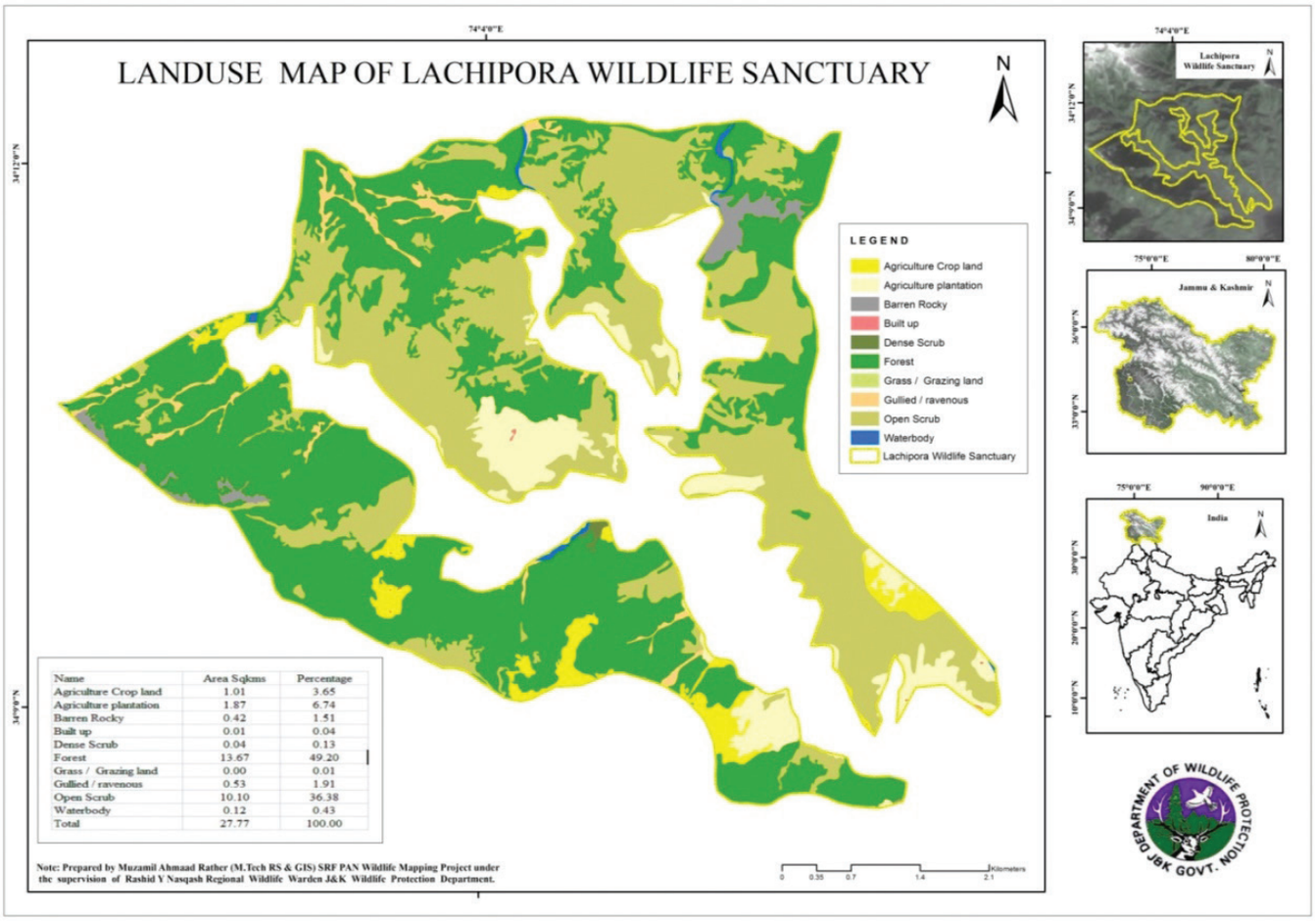
Protected Area	Latitude	Longitude	Altitude	Area(km2)
			Range(m)	
Lachipora WLS	**34°07′ to 34°14′**	**74°00′ to 74°06′**	**1916-4212**	**27.77**



A satellite image of Lachipora Wildlife Sanctuary

Approach and Access

The main village-Lachipora is connected to Srinagar, the summer capital of the state of jammu and Kashmir and located about 80km away by an all weather road. Srinagar can be accessed from the rest of the country by road and air.
The Sanctuary being mountainous (Figure 1.2), has some jeepable roads allowing access to the base of the mountains. Thereafter a network of trails and bridle paths allows access to most areas of the Sanctuary. However certain parts of the Sanctuary are steep and access is tough. Being very close to the LoC, some areas, especially towards the west (Lachipora) may be out of bounds.



Limber Wildlife Sanctuary

Name , location, Constitution and extent of the area

The Limber Wildlife Sanctuary lies between 34° 07′ to 34° 15′N and 74° 09′ to 74° 12′ E. The total area of the Sanctuary is about 18.54 Km2.The sanctuary came in existence under notification **order No SRO 157 Dated 19th March ,1987** under the provisions of the Jammu and Kashmir Wildlife Protection Act,1978 later in 2007, higher elevations of the Limber Wildlife Sanctuary were merged in Kazinag National park. Prior to this area being declared Wildlife Sanctuaries,

The detailed information on location, area and altitudinal ranges of Limber Wildlife Sanctuary is asa under:

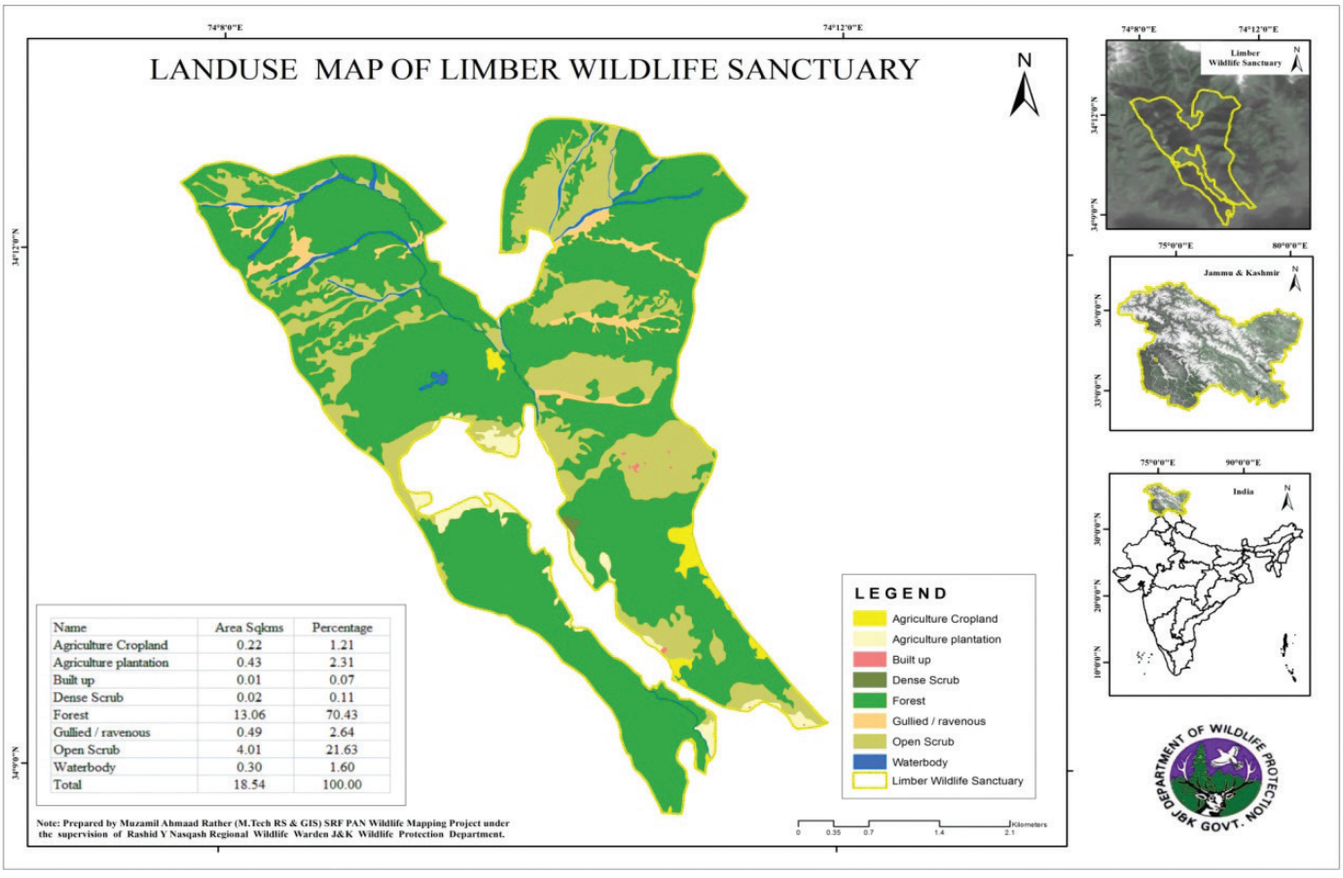
Protected Area	Latitude	Longitude	Altitude	Area(km2)
			Range(m)	
Limber WLS	**34°07′ to 34°15′**	**74°09′ to 74°12′**	**1509-3903**	**18.54**

Approach and Access

The main village-Limber is connected to Srinagar, the summer capital of the state of jammu and Kashmir and located about 80km away by an all weather road. Srinagar can be accessed from the rest of the country by road and air. The Wildlife Sanctuary being mountainous has some jeepable roads allowing access to the base of the mountains. Thereafter a network of trails and bridle paths allows access to most areas of the Sanctuary. However certain parts of the Sanctuary are steep and access is tough. Being very close to the Loc, some areasmay be out of bounds.



A satellite image of Limber Wildlife Sanctuary



Naganari Conservation Reserve

1.4 Name , location, Constitution and extent of the area

The Naganarai CR has been named after the Naganari village which is the base of the reserve. Naganari Conservation Reserve is about 20 km2 and lies to the east of the Limber WLS. Towards north is the Rafiabad forests and on the south lies River Jhelum. The topography is similar to that of Limberrocky cliffs interspersed in the conifer forests. At the lower elevations, temperate grasslands dominate the landscape. Lachipora was however more open and rugged compared to Naganari and Limber.

This area also has few villages at the base and the population is dominated by gujjars and pahadis who are mainly dependent on livestock. They also grow maize and own walnut trees. Most of them move to dokes with their livestock during summer. Besides markhor, Naganari also harbours goral, musk deer, leopard, cheer, koklas and monal.

The Nagana Wildlife Sanctuary lies between 34° 10′ to 34° 13′N and 74° 12′ to 74° 14′ E. The total area of the Reserve is about 9.8 Km2.The Reserve came in existence under notification **order No SRO 157 Dated 19th March ,1987** under the provisions of the Jammu and Kashmir Wildlife Protection Act,1978 later in 2007, higher elevations of the Naganari CR were merged in Kazinag National park. **The detailed information on location, area and altitudinal ranges of Naganari CR is as under:**

Protected Area	Latitude	Longitude	Altitude	Area(km2)
			Range(m)	
Naganari CR	**34° 10′ to 34° 13′N**	**74° 12′ to 74° 14′ E**	**1509-2970**	**9.77**

Approach and Access

The main villages Naganari and Pahli[ora are connected to Srinagar, the summer capital of the and located about 65km away by an all weather road and train. Srinagar can be accessed from the rest of the country by road and air. The CR being mountainous has some jeepable roads allowing access to the base of the mountains. Thereafter a network of trails and bridle paths allows access to most areas of the Reserve. However certain parts of the Reserve are steep and access is tough. The Reserve gives easy access to reach to the famous alpine meadows of Viji.

Significance and conservation value of areas:

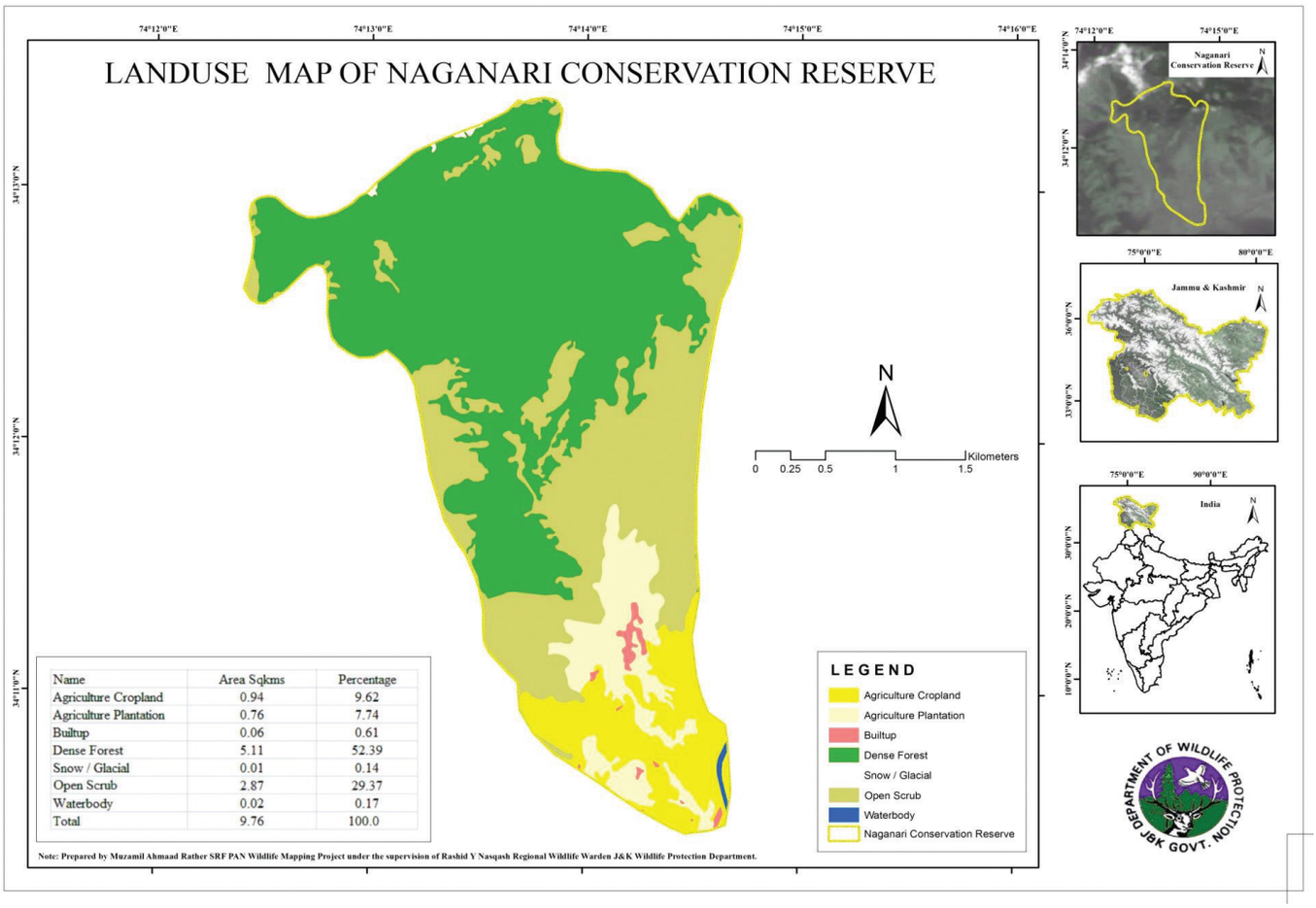
Naganari Conservation Reserve represents the Himalayan dry temperate and Himalayan moist temperate forests (Champion and Seth 1968) of the western Himalaya and contains a rich assemblage of threatened and rare flora and fauna, some of which are localized in their distribution. At its top, it was bestowed with some fine and beautiful alpine meadows and birch forests and part of that has been merged with Kazinag NP. At lower elevations it is covered with deodar forests and the temperate grasslands. Naganari harbours the important mountain ungulate species of markhor, musk deer and goral. Besides monal and koklas, Naganri is home to the threatened cheer pheasant.

Conservation issues of the Reserve

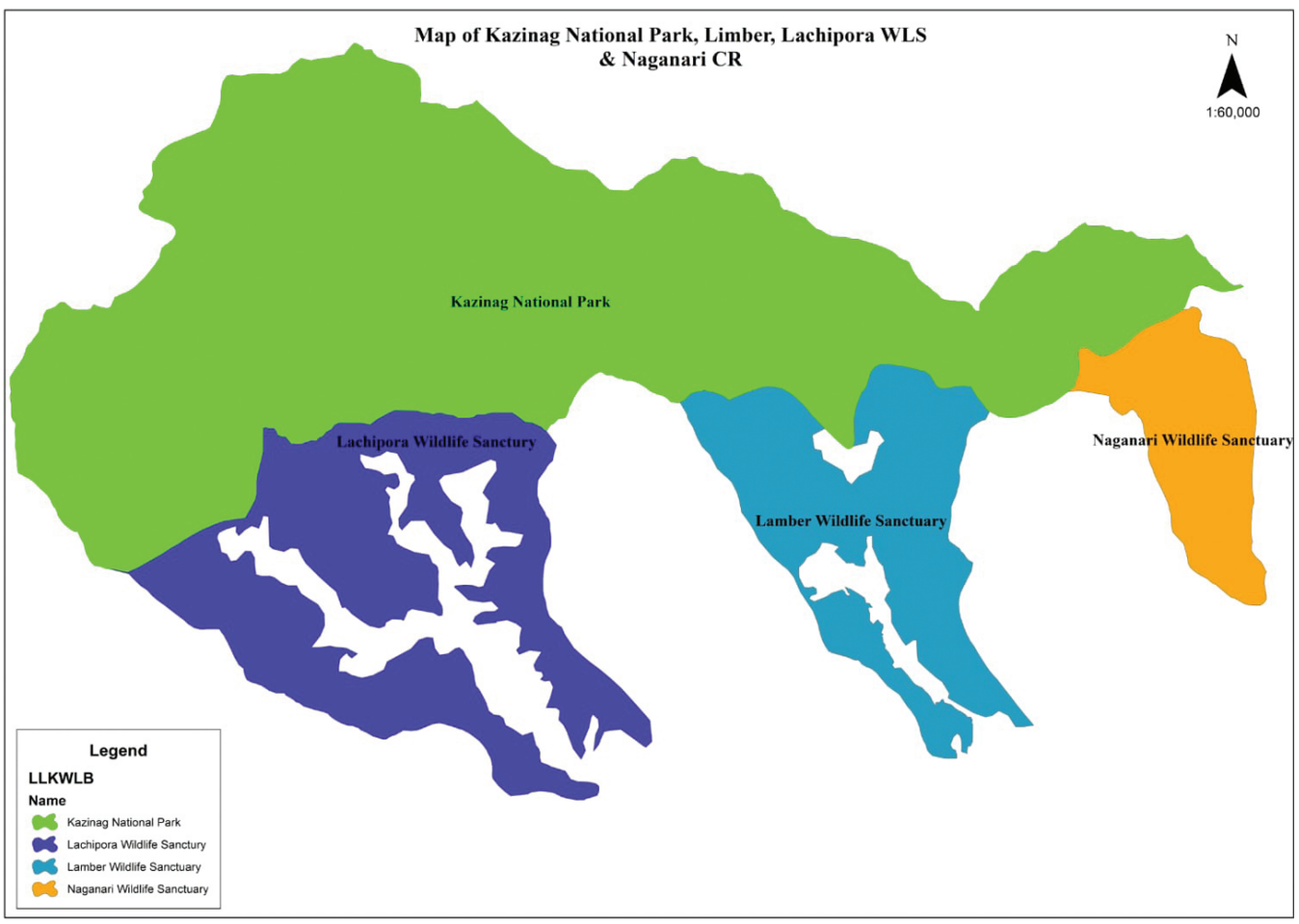
The major issues in the area are timber smuggling, poaching and livestock grazing. The area is connected to Rafiabad forests on the backside and the smugglers access the area from that area. Poachers generally come for musk deer and markhor especially during winters. Migratory herders and locals graze their livestock in almost all the locations of the reserve. There is no infrastructure for patrolling and staff in and around the CR making the job of the staff difficult.

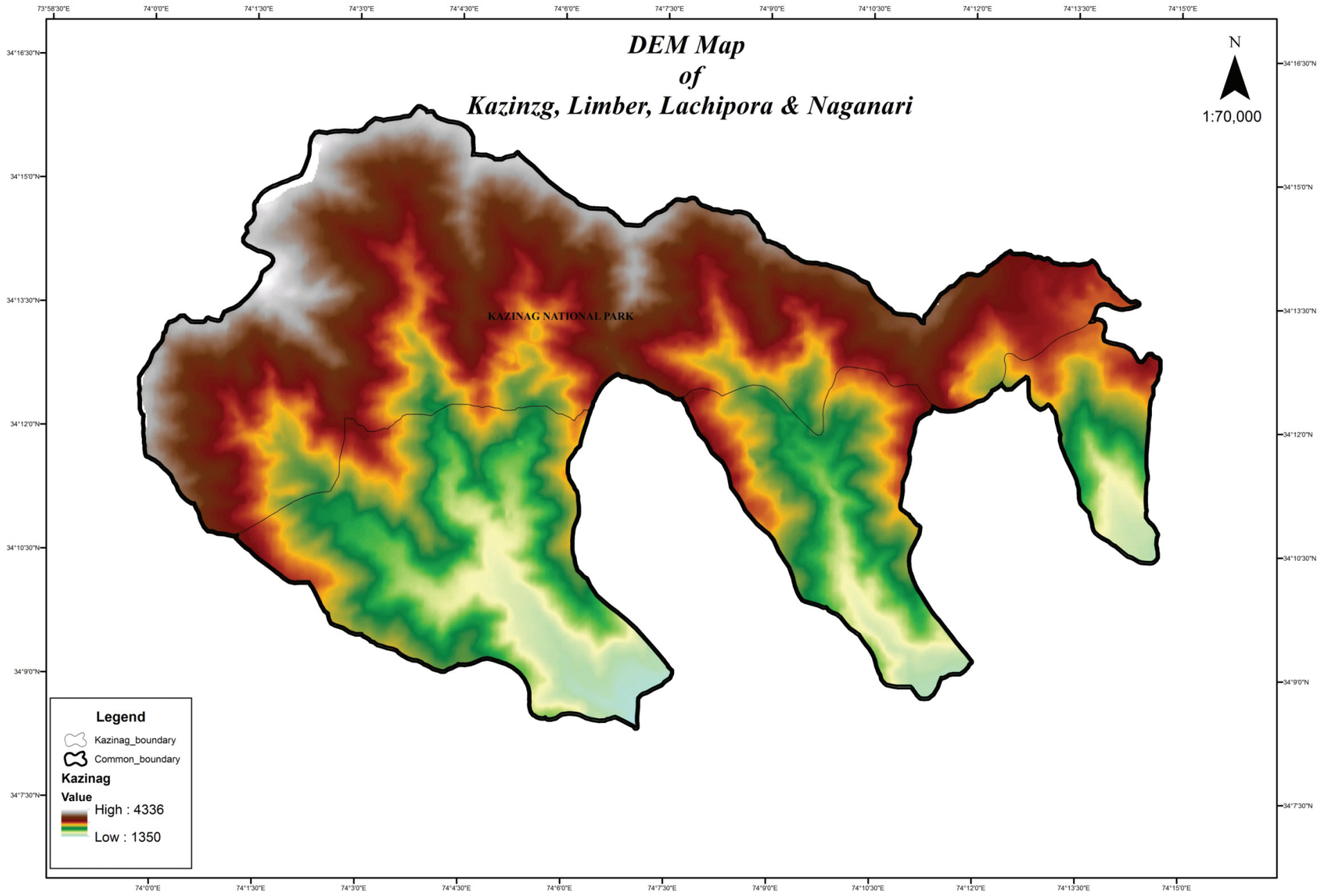
1.5 Significance and conservation value of areas:

Kazinag National Park along with limber &Lachipora wildlife sanctuary represents the Himalayan dry temperate and Himalayan moist temperate forests (Champion and Seth 1968) of the western Himalaya and contains a rich assemblage of threatened and rare flora and fauna, some of which are localized in their distribution. For instance, Kazinag range is the last hope for the Kashmir markhor (*Capra falconeri*) of which, the bulk of the population occurs here. Other important species present are Kashmir musk deer (*Moschus cupreus)*, brown bear (*Ursus arctos*), goral (*Naemorhaedus goral*), additionally, two globally threatened pheasant species – the western tragopan (*Tragopan melanocephalus*) and the cheer (*Catreus wallichi*) are found in this park and these may form very significant global populations, especially for the former. This area also contains 11 restricted range bird species (Stattersfield *et al.*1998). The area thus contains substantial faunal attributes of local and global significance that may be in threat if appropriate protection is not afforded. The threatened high medicinal value plants such as *Saussuera costus, Aconitum, Arnebia, Jurinea*.



Name	Area Sqkms	Percentage
Agriculture Cropland	0.94	9.62
Agriculture Plantation	0.76	7.74
Builtup	0.06	0.61
Dense Forest	5.11	52.39
Snow / Glacial	0.01	0.14
Open Scrub	2.87	29.37
Waterbody	0.02	0.17
Total	9.76	100.0




DEM Map
of
Kazinzg, Limber, Lachipora & Naganari
N
1:70,000
KAZINAG NATIONAL PARK
73°58'30"E
74°0'0"E
74°1'30"E
74°3'0"E
74°4'30"E
74°6'0"E
74°7'30"E
74°9'0"E
74°10'30"E
74°12'0"E
74°13'30"E
74°15'0"E
34°16'30"N
34°15'0"N
34°13'30"N
34°12'0"N
34°10'30"N
34°9'0"N
34°7'30"N
Legend
Kazinag_boundary
Common_boundary
Kazinag
Value
High : 4336
Low : 1350

Chapter 2

BACKGROUND INFORMATION AND ATTRIBUTES

2.1 Boundaries

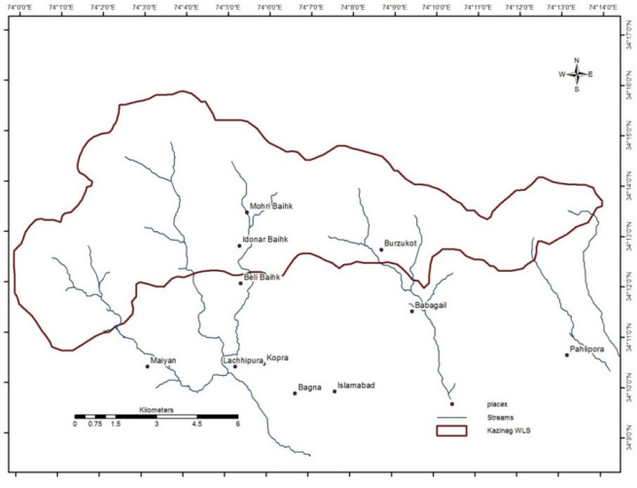
The boundaries of the National Park are:

North: Kazi-Nag Dhar and Langate Forest Division

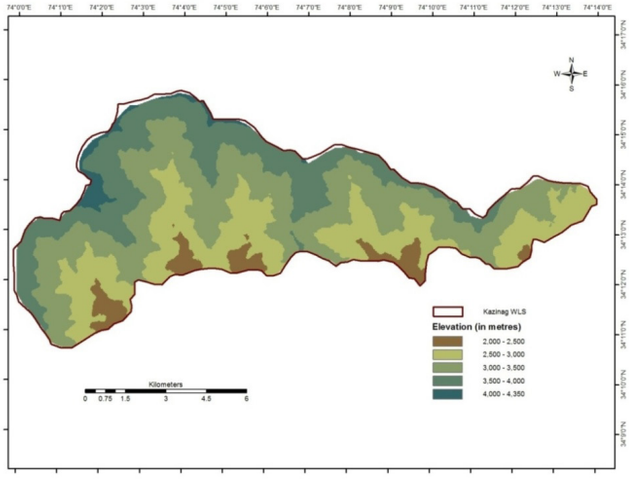
South: Harwaji Bahak, Nilsar, Dragan Bahak, Nagrin Bahak, Kafarmore and Chitrakoot (3093).

East: Zahanpora Forest (CO 1E/K)

West: Line of control (Sridhar Range)



The Kazinag NP boundary with drainage



Major elevation categories (500m interval) present in Kazinag National Park

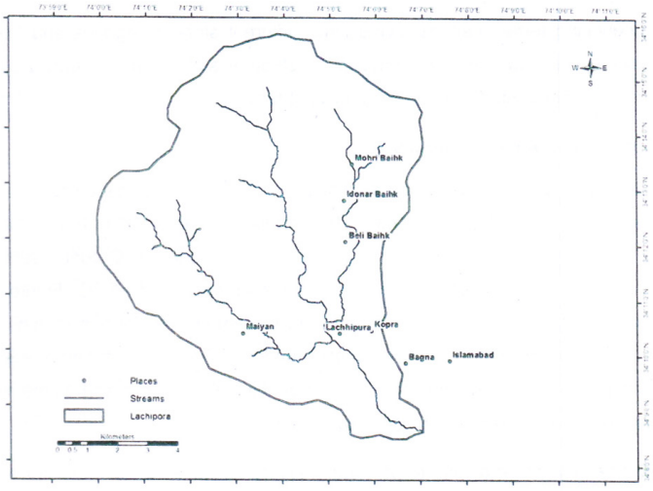
2.2 The Lachipora WLS designated boundaries vide SRO 150 DATED 19 March 1987 (Lachipora). The boundaries of the Sanctuary are:

North: Kazinag Dhar and Kazinag Spring

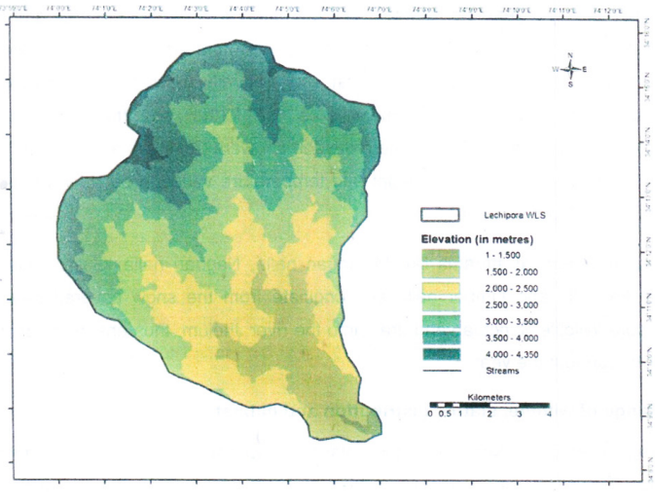
South: River Jhelum

East :Limber WLS and Bagna nala

West: LOC



The Lachipora Wildlife Sanctuary boundaries with drainage



Major elevation categories (500m Interval) present in Lachipora WLS.

2.3 The Limber WLS has designatedboundaries vide SRO 157 DATED 19 March 1987 (Limber). The boundaries of the Wildlife Sanctuary are:

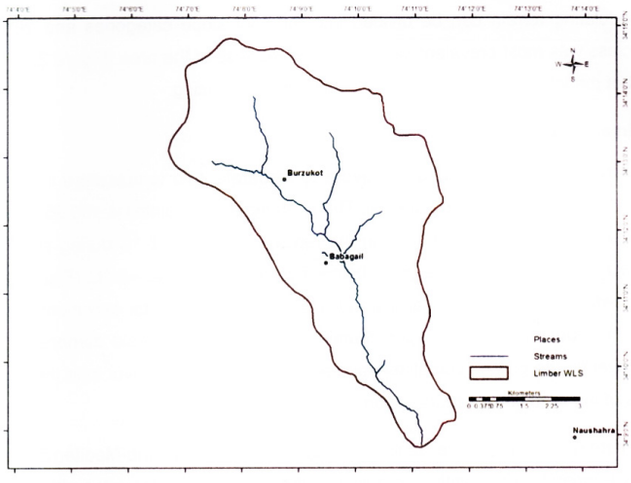
Give boundaries of Limber

North: Rafiabad

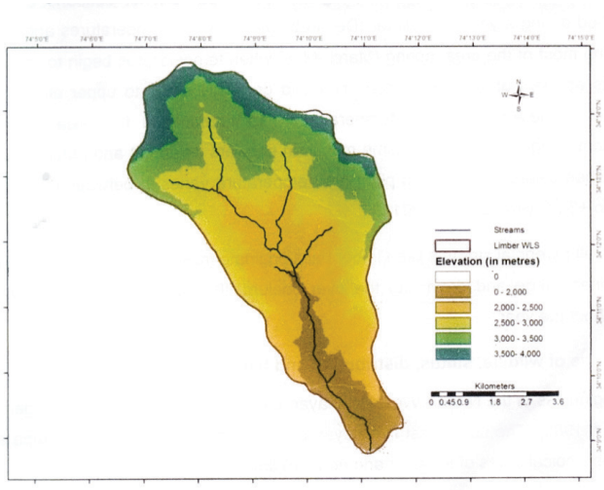
South: Buniyar

East: Naganri

West: Lachipora



The Limber WLS boundary with drainage.



Major elevation categories (500m Interval) present in Limber WLS.

2.4 Geology, rock and soil

As far as the geology of this area is concerned, the area has been grouped into the Buniyar Group containing Arenite/Quartzite with bands of Gypsum and sulphides. The Buniyar group except for the lowermost limestone areas includes low grade meta segments ranging from phyllites to slates.
The Buniyar group is overlain by the Pirpanjal Volcanic Group. This group is characterized by various volcanic flows. The flows are andesitic in composition though basic flows are not uncommon (Zadoo 1980).
Some important minerals found in the area are Gypsum, Graphite and Limestone

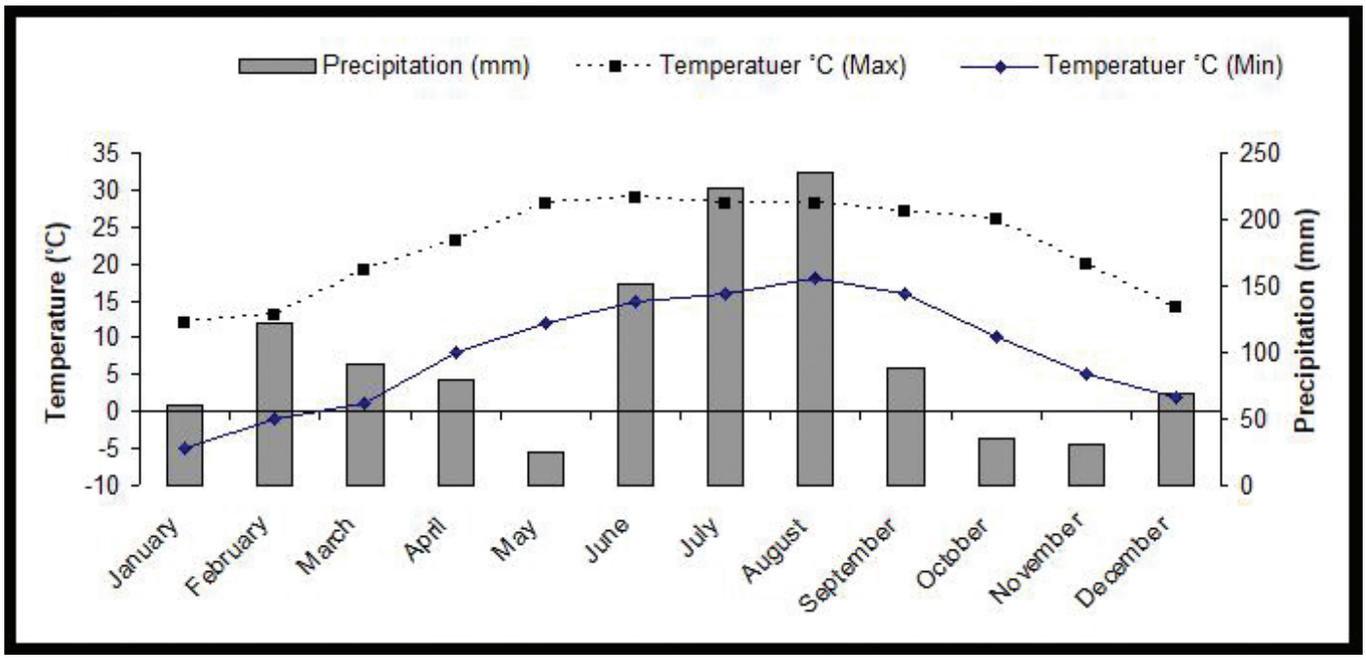
2.5 Terrain and drainage

The topography of protected areas is mountainous with slopes of moderate to steep gradient broken by rocky cliffs. The area has an altitudinal range of 2000 to 4350 msl .The terrain can be divided into different slope categories and 20°-40° slope class was most prevalent denoting the steepness of the area .The aspect of the park is pre-dominantly east facing. The small perennial streams like Malangan nalla, Nagnari nalla, Gujjar nalla and Meem ka nalla and Limber nalla, Lachipora etc. originate from the snow covered peaks of Kazinag National Park and drain into the river Jhelum, thus ensuring adequate water throughout the year.

2.6 Climate

The Uri region is characterized by severe to moderate cold temperature in winters and moderate temperature in summer. The average annual rainfall is 100.95 mm per annum. The maximum temperature in the region goes upto 28 °C during summers and the minimum temperature goes below freezing point upto –5 °C (Figure 2.4). The snowfall is almost universal starting from December and for two months upto middle of February, and the region remains under the grip of cold dampness with snow covering the ground completely and perennial fog hanging over it. In the higher regions of the area snow accumulation can reach up to 2 m.

The climate of the area may be described as sub-Mediterranean to typically temperate. Precipitation is mainly in the form of snow in winter with rains in March with occasional showers during summer. Four distinct seasons can be classified during a year, *viz.* winter (Dec-Feb) with very low temperatures and snow covering most of the area, spring (March-May) when temperatures begin to rise and sprouts appears at lower elevations first and gradually move to upper elevations, summer (June-August) when temperatures rise further and the area contains abundant forage and receives some monsoon showers (residual) and autumn (Sep-Nov) when senescence sets in plant and temperature varies in between range of -15^{0}C to +30^{0}C (Ahmed *et al.* 2010).



Monthly precipitation and minimum and maximum temperature in Uri region (Source: District Meteorological Records)

2.7.Distribution of wildlife and habitat

The altitudinal range and the distinct vegetation types result in rich flora and fauna of the area.

2.8 Flora

Major land cover classes of the protected network area: Dense forests, Open forests, Scrub, Alpine pastures, water and Snow covered areas. Three broad vegetation types are represented in the protected area are thewestern mixed coniferous forest, west Himalayan sub Alpine Birch, Deciduous sub alpine scrub and sub Alpine Pastures (Champion & Seth 1968). Out of the about 200 plant species identified from protected area network about 150 species are herbs/forbs, 20 species are graminoids, 25 species are shrubs and 20 species are trees (Ahmad 2014).

The vegetation is dominated by coniferous forests of Kail *(Pinus wallichiana),* Fir *(Abies spectabilis),* Spruce *(Picea smithiana)* and Deodar (*Cedrus deodara).* The Birch (*Betula utilis)* forests occur near the tree line in combination with Fir and Kail whereas the other broad leaf forests are mainly confined to areas along nallas (hill streams). The sub alpine area is dominated by juniper scrub *(Juniperus squamata).* Most of the area is interspersed with cliffs and rocky outcrops (Plate 1). In the broad leaved category, birch occurs in sub-alpine areas, *Acer-Prunus* at middle and the horse chestnut (*Aesculusindica*.) and walnut (*Juglansregia*.) at the lower elevations of park (Ahmad 2014). Other low altitude species found are Ash (*Fraxinus excelsior*), Willow (*Salix* sp.) and Elm (*Ulmus wallichiana*).

There are temperate grasslands (western-eastern aspects) at lower elevations along western and eastern aspects. The temperate scrub occurs at middle and lower elevations and is dominated by *Indigofera, Spirea* and *Rosa*. The sub-alpine and alpine scrub occurs at higher elevations and is dominated by *Juniperus, Lonicera* and *Salix*. Other shrub species include *Rosa macrofolia*, and *Viburnumgrandiflorum* that are dominant along nallas in lower elevations (Ahmed *pers. obs.*). A brief description of the forests is given below:

1. Coniferous Forests

i. Deodar: These occur on pure or in mixed form on well drained soils. *Parrotiopsis jacquemontiana* or *Viburnum grandiflorum* are generally the associated understory forms. In the area, these forests are encountered in all the three sanctuaries and layer often form the lowest layer of the conifers.

ii. Blue Pine (Kail): Found generally above 2000-2400 m, they may be found towards the higher elevations, intermixed with fir (*Abies pindrow*) and at lower altitudes with deodar (*Cedrus deodara*). Kail also tends to establish where conditions become unfavourable for other moisture loving species due to excessive biotic interference (Zadoo, 1980). Its broad leaved associates include *Aesculus indica*, *Juglans regia*, *Acer caesium* and *Betula utilis,* indicating the altitudinal range over which this species is found. The undercover consists of *Indigofera heterantha* and *Viburnum grandiflorum*, when sparse clumps of *Rosawebbiana* and *Lonicera quinquelocularis* mix with it at several places (Baba 2005). Found all over the park.

iii. Silver Fir: The dominant species is *Abies pindrow* and generally occur in the altitude of 2400-3200 m and may occur in almost pure belts or sometimes with a sprinkling of spruce (*Picea smithiana*). At lower altitudes, Kail and deodar are found as its associates. Main broad leaved associates of fir are walnut, ash, maple, horse chestnut etc. Undergrowth is mainly *Viburnum* sp. *Skimmia laureola*, *Sambucusebulus*, *Phytolaca acinosa* etc.

2. Broad-leaved Woodland

Most of the broadleaved species are found at lower altitudes in the village-forest interface zone. These comprise both artificially raised plantations as well as natural forest communities. Examples are:

i. Chinar Stands: Patches of this majestic tree (*Platanus orientalis*) are found in both Limber and Lachipora areas close to human settlements. Being a protected tree of the state, these mainly add to the aesthetic value of the location apart from providing shaded areas in summers.

ii. Walnut: Stands of walnut (*Juglans regia*) occur all over, in proximity to human habitations. Some walnut trees are also interspersed higher up with horse-chestnut (*Aesculus indica*) stands and away from settlements.

iii. Horse Chestnut: The horse chestnut occurs in nearly pure patches and occasionally accompanied by Walnut in the low lying areas and base of the mountains and closer to streams. Main understorey species comprise of *Sorbaria tomentosa* and *Viburnum grandiflorum.*

iv. Birch: Narrow patches of birch occur just below the alpine areas mostly in pure standsbutis sometimes mixed with fir, above 3200 m. It forms the main constituent of subalpine forest. The associated shrub species are Salix, Juniper and Lonicera.

3. Sub-alpine and Alpine Vegetation:

i. Subalpine Forests: The fir forests merge with the Birch (*Betula utilis*) forests on the higher ground which then opens up into alpine grasslands above 3,300 m. The shrub layer in the subalpine forests is dominated by Lonicera Spinosa, Salix, and *Juniperus communis*.

ii. Alpine meadows and scrub: These grasslands or "margs" are interspersed with juniper (*Juniperus communis*)and dwarf rhododendron (*Rhododendron companulatum*). Other species of herbs (Plate 2) found in alpine areas are *Inula*, *Caltha*, *Primula*, *Potentilla*, *Corydalis*, *Gentiana*, *Anemone*, *Myosotis* etc. Alpine grasslands are extensively used by migrant herders to graze their flocks during summers.

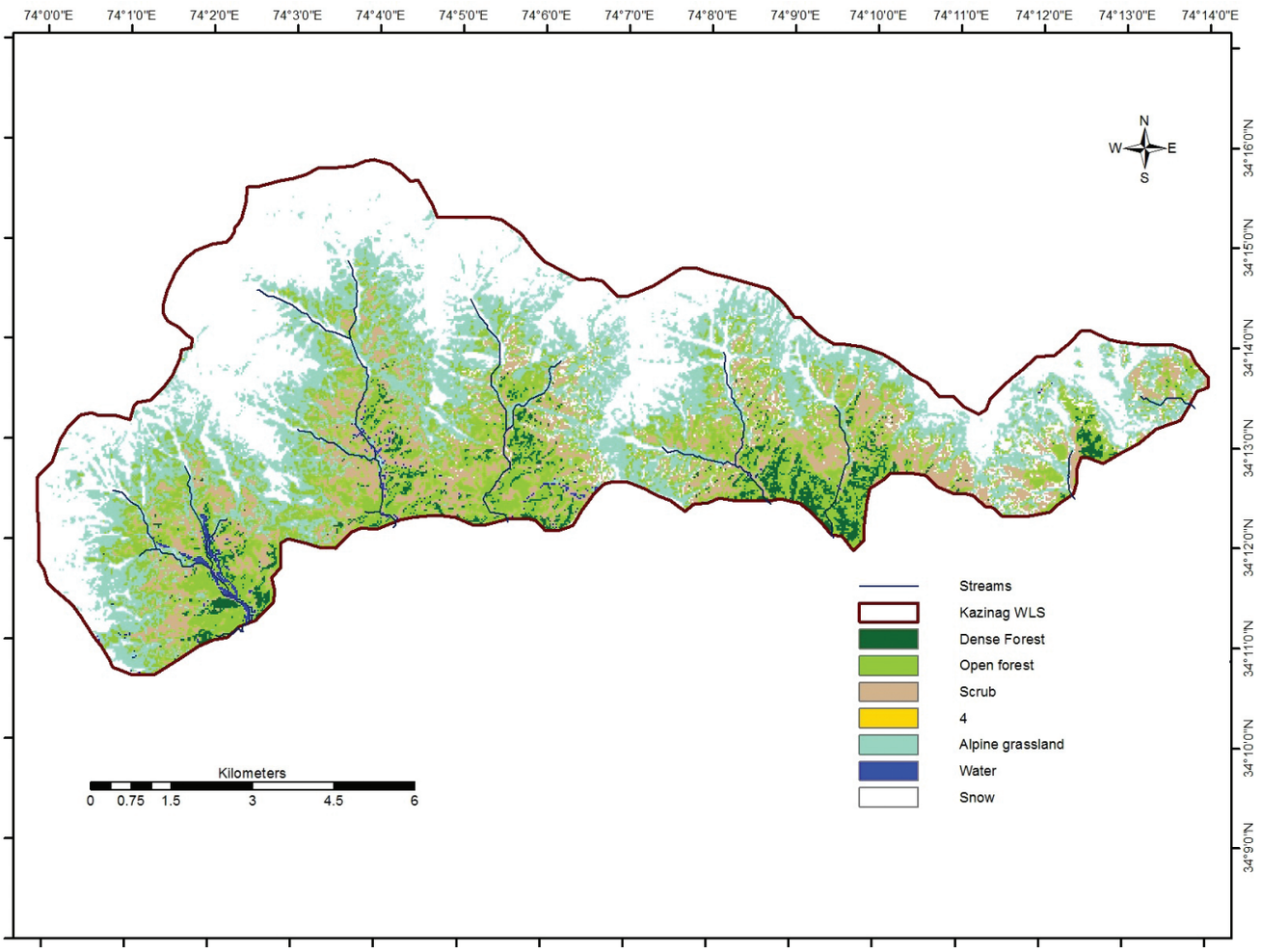
4. Temperate Scrub and Grasslands

i. Parrotiopsis: A small but young patch of*Parrotiopsis jacquemontiana* occurs along the mountainous ridge near Limber village, which is sparsely mixed with clumps of *Viburnum grandiflorum.*

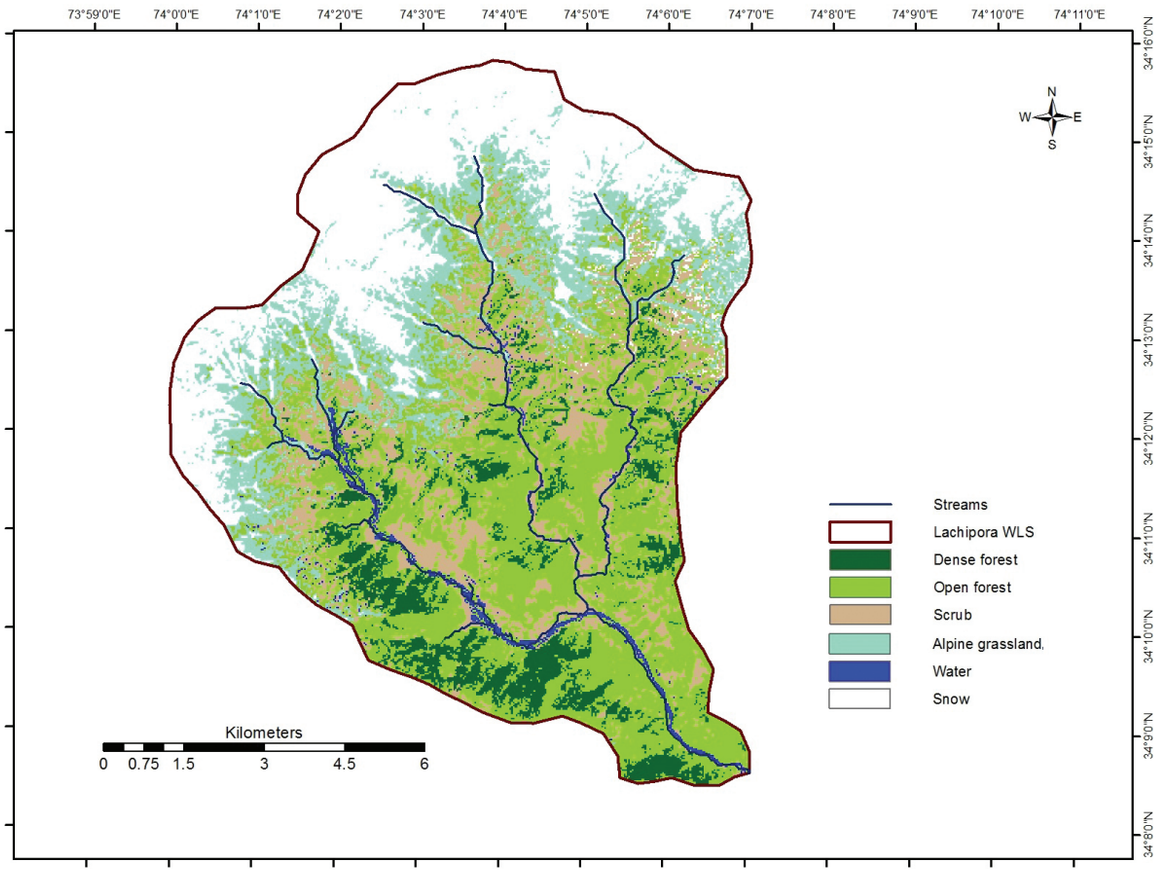
ii. Isodon Scrub: The *Isodon rugosus* scrub is pre-dominantly found on the eastern ridge extending below Limber village with individuals of *Cedrus deodara*, *Pinus griffithi*, *Parraptiopsis jacquemontiana* and *Viburnum continifolium*, association along ridges and shady gentle slopes.

iii. Savana Scrub: Tall unidentified coarse grasses dotted with *Pinus griffithii* support *Indigofera heterantha* and *Rosa webbiana* along exposed slopes, when shady gentle slopes bear *Sorbaria tomentosa* and stunt *Salix alba* associations.

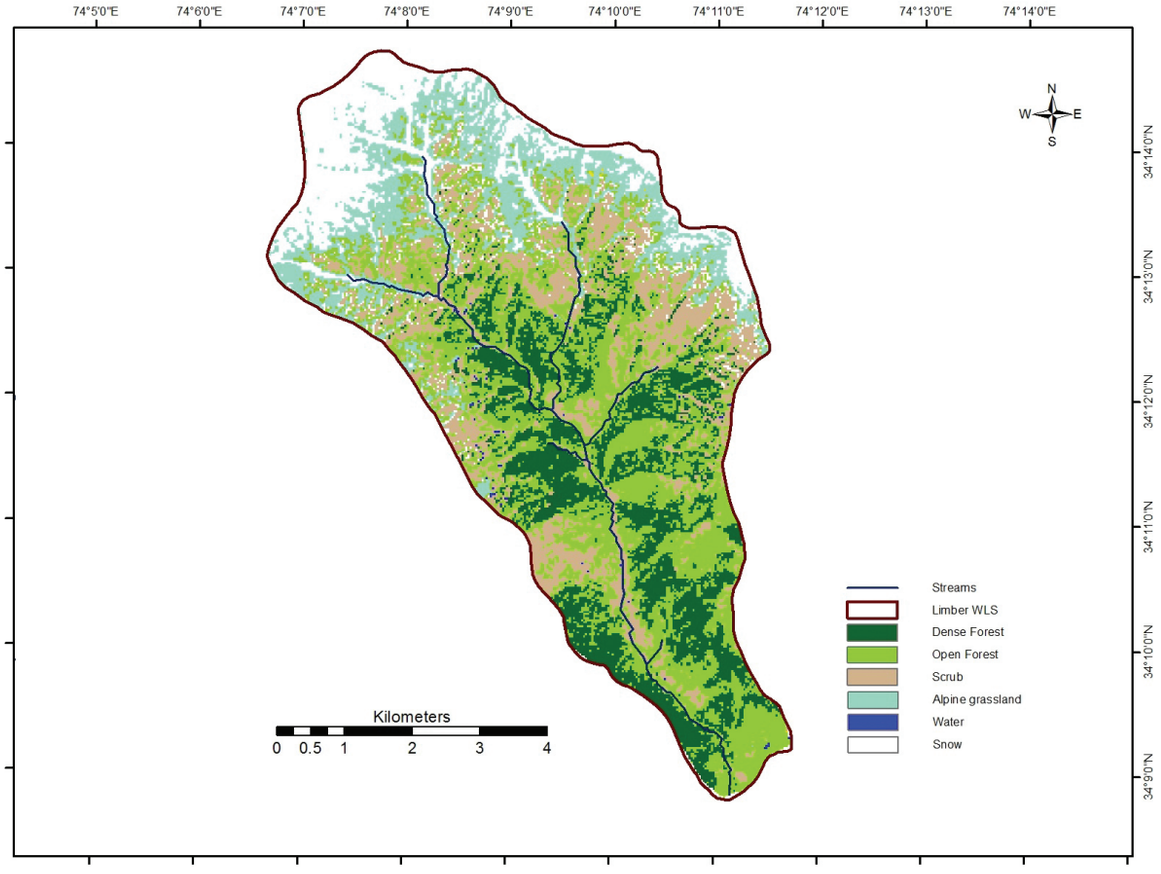
iv. **Temperate Grassland:** There are open grasslands at lower altitudes which are generally managed by people who cut the grass in these grasslands. These grasslands are dominated by grass species like sorghum.



Major land cover classes present in Kazinag National Park



Major land cover classes present in Lachipora Wildlife Sanctuary



Major land cover classes present in Limber WLS

Plate 1: Different wildlife habitats including conifer forests, steep slopes and snow-covered areasin Kazinag National Park, Lachipora & Limber Wildlife Sanctuary.









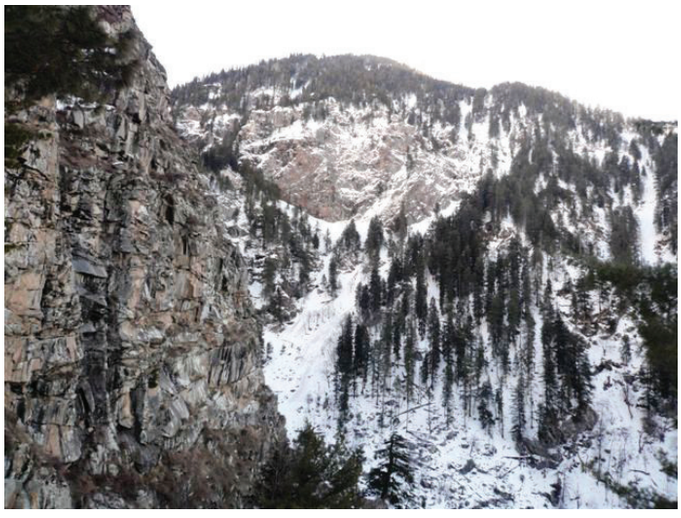


Plate 2: A glimpse of the floristic diversity of sub-alpine and alpine areas of Kazinag National Park



JURINEA MACROCEPHALA



DIPSACUS MERINUS



PEDICULARIS



RHODODENDRON CAMPANULATUM



PRIMULA DENICULATA

2.9 Fauna

The fauna of Jammu and Kashmir is unique and diverse due to its geographical location, allowing for influences of the Tibetan elements mixed with those of the Himalayan and the peninsular Indian elements (Kaul, 2002). Kazinag area is unique in that it has predominantly typical flora of the Kashmir temperate type (see Zadoo 1980). However, Kazinag is located in the western part of the Kashmir, the Jhelum river gorge allowing for elements from the outer Himalaya access to the valley. Thus this area sees faunal species like the goral (*Nemorhaedus goral*) and Kalij and the recently sighted wild boar (*Sus scrofa*), the only PA within the valley with this assemblage. The main faunal species of these protected areas are:

Fish

Although no studies have been conducted on the fish diversity in protected areas, no fish species of note are found in the streams of area. Apparently the water in the Limber nalla has high mineral and iron content may not be conducive to supporting much aquatic life. This however needs to be investigated.

Herpeto-fauna

Herpetofauna in this area has not been fully documented till date, although presence of Kashmir Rock Agama (*Laudakia tuberculata*) and Himalayan Pit Viper(*Gloydius himalayanus*) has been reported from the protected areas (Ahmad, Pers. obser). About 68 species of reptiles and 14 species of amphibians have been recorded from of Jammu and Kashmir.

Avifauna

The avifauna of the Himalaya is mainly a conglomerate of Palearctic and Indochinese elements, the former predominating in Kashmir and the western section, the latter in eastern area (reviewed in Ali 1981). Over 600species of birds are recorded from the erstwhile state of Jammu and Kashmir (Suhail et al. 2020). A preliminary list of a 129 species has been produced fromLimber Valleyof the Park, (Javed 1992, Baba 2005) which is a good representative of the temperate forest avifauna of the National Park (see Annexure 1). Of these, seven are globally threatened (IUCN 2012) and six are restricted range species (Stattersfield *et al.* 1998).

Western Tragopan

The Kazinag National Park is one of the global strongholds of the western tragopan. Within the park, the western tragopan occurs between 2700-3,100 m. In a survey conducted in 2007, a total of 46 calling groups of western tragopan were recorded from these areas (Kaul and Ahmad, 2007; Ahmad et al. 2016). This translates to a minimum of 46 calling males making it a globally significant area.
Other threatened species found in Kazinag NP are the scavenger vulture (*Neophron percnopterus*), speckled wood pigeon (*Columba eversmanni*), Kashmir red breasted flycatcher (*Ficedulasubrubra*), European roller (*Coracias garrulous*) and Tytler's leaf warbler (*Phylloscopus tytleri*).
The NPharboursan impressive community of raptors (13 species) including the golden eagle (*Aquila chrysaetus*), galliformes such as Himalayan monal (*Lophophorus impejanus*), Koklas pheasant (*Pucrasia macrolopha*), Himalayan snowcock (*Tetraogallus himalayensis*) and snow partridge (*Lerwa lerwa*) as other notable bird species (Plate 2).

Mammals

Kazinag National Park is amongst the last refuges of the Kashmir markhor (*Capra falconeri*), a globally threatened wild goat, in India. Other mammals that are threatened and found in the Park (Plate 4) are Himalayan brown bear (*Ursus arctos*), Asiatic black bear (*Ursus thibetanus*), leopard, Kashmir musk deer (*Moschus leucogaster*),Kashmir grey langur Jungle cat, yellow throated marting and the small Kashmir flying squirrel (*Eoglaucomys fimbriatus*). Additionally the KNP also has a good population of goral (*Nemorhaedus goral*), (see annexure),Important species are:

Markhor *(Capra falconeri falconeri)*

Markhor, the largest wild goat is a threatenedspecies (IUCN 2014). Sub species *falconeri* is sporadically distributed in Jammu and Kashmir in the Pirpanjal and the Kazinag ranges (Ranjitsinh *et al.* 2005, Bhatnagar *et al.* 2007). Usually, markhor is found above3000 m in summer but in winter may descend to low and mid elevations below 3000 m.
The cliffs and steep forested slopes of Methwani, Gujjar, Malangan and Naganari nallahs are important areas for distribution of markhor in Kazinag. The population of markhor was estimated about 150 individuals during 2004-05 in Kazinag (Ranjitsinh *et al.* 2005;Bhatnagar et al. 2009). The current population seems around 200 individuals.
Habitats preferred by markhor are those involving steep slopes (>45°) in summer and less steep during winters, a manifestation of competition exerted by domestic sheep and goat, driving the markhor into steep inaccessible cliffs with inferior graze (Ahmad *et al.* 2015; Ahmad 2014).
Markhor were in the past threatened due to local hunting, especially in winter and also due to competition with migrant livestock. Sporadic hunting may occur even now and livestock grazing continues.

Brown Bear *(Ursus arctos)*

The Brown Bear occurs in the subalpine and alpine regions (3000-5000 m) of the Greater Himalayan and Trans Himalayan regions of India (Sathyakumar 2001). The species is listed as 'Least Concern' in IUCN but is listed as Schedule I species in Wildlife Protection Act of J&K 1972 (IUCN 2012, Anon 2002). The Kazinag NP holds brown bear in reasonable numbers although estimates are not available. They are often involved with in-

cidences of livestock predation (Ahmed *pers. observ.*), especially in summer when the migrant sheep and goat inhabit those altitudes.

Kashmir Musk Deer *(Moschus cupreus)*

This is amongst the best places to sight the musk deer across the whole Himalaya which is indicative of the significant population of this endangered species in this protected area.It is found in the alpine pastures, subalpine habitats, sub-alpine forests and open conifer and mixed forests almost across all major areas of the protected areas date on abundance estimates are however lacking.

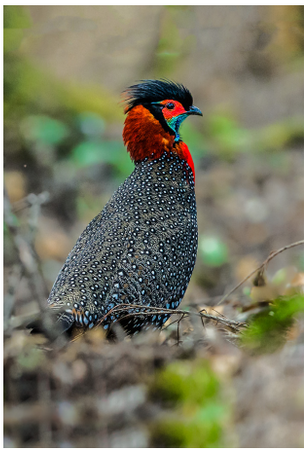
Goral (*Nemorhaedus goral*)

This species is unique to this area within the Parkdue to its proximity with mountains of the outer Himalaya.The goral is found in specific areas of the protected areas closely associated, as like other locations, with cheer pheasant, occupying steep grassy areas.

Black bear (*Ursus thibetanus*)

The black bear is commonly distributed in the low and middle forested areas of the protected areas. Although it is relatively commonly found, not too many instances of conflict with humans have been reported. But it raids crops in the fringe villages. No estimates of its abundance are however available, however from the Park. Plate.3

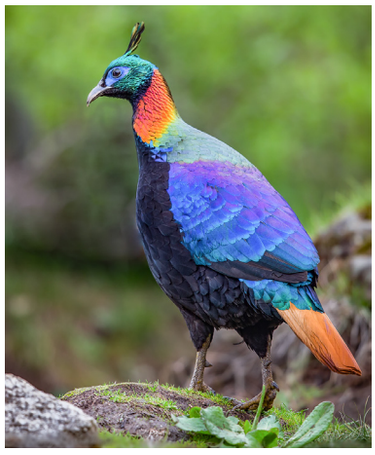
Plate 3: A glimpse of the Avifaunal diversity of Kazinag National Park



Western Tragopan
Tragopan melanocephalus



Himalayan Snowcock
Tetragallus himalayensis



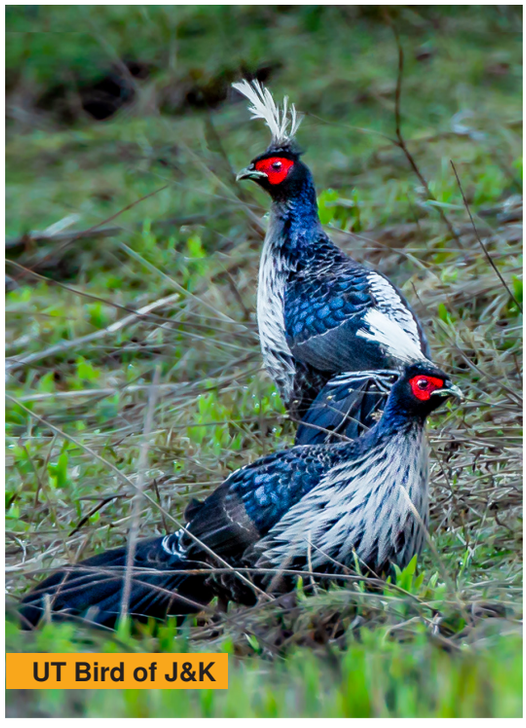
Himalayan Monal
Lophophorus impejanus



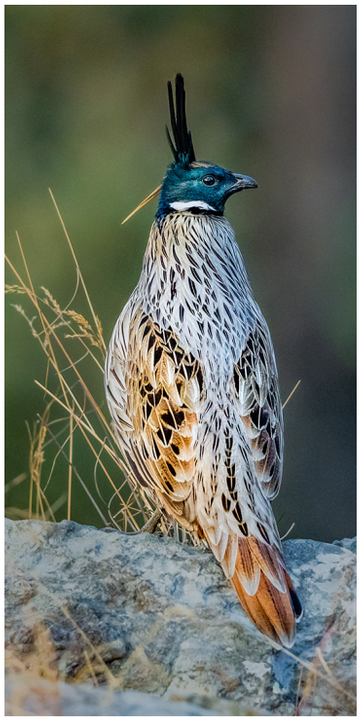
Cheer Pheasant
Catreus wallichii



Chukar Partridge
Alectoris chukar



Kaleej Pheasant
Lophura leucomelanos



Koklass Pheasant
Pucrasia macrolopha

Plate 4: A glimpse of the mammal diversity of Kazinag National Park



Brown Bear



Black Bear



Markhor



Goral



Leopard Cat



Leopard

Chapter 3

HISTORY OF MANAGEMENT AND PRESENT PRACTICES

Any semblance of forest protection came into force in the year 1857-58 with the formation of the *Mahal Nawara* (Department of Forests). Prior to this, forests in J&K, it appears, were largely uncontrolled. The department could not control exploitation of forest resources by local communities and in the year 1833, the *Aain-i-Janglat* was enacted. Two main actions of the department, i.e. harvesting and protection were recognized with the two branches of the forest department being formed – a *Mahal Nawara* responsible for extraction and revenue generation and a *Mahal Janglat* responsible for their protection. There were no limits so for a nominal royality, forests were destroyed without check.

The Kazinag National Park, Limber & Lachipora falls under the Kathai Forests within the Baramulla Block within which scientific management of some forest areas was taken up in 1911. However, the forests of Uri and Kathai were not covered under any plan and therefore no systematic work was undertaken (Zadoo 1980).

i) Timber Operations including firewood harvest

Silvicultural systems and tending operations

In the early part of the twentieth century, the forests of Uri and Kathai (the present area) were not covered under any plan and therefore no systematic work was undertaken. The first scientific working of these areas was undertaken under the Salaria's Plan (1930-1939) which was modified by J L Khushoo in 1939-40 and the plan was operational from 1941-1950. Thereafter, the plan was revised several times i.e. the Naqash Plan (1967-1977) and Zadoo (1980-1990). Compartments of the Kathai range, some of which were already a game reserve of the erstwhile maharaja of J&K were declared into three protected areas, namely the Lachipora Wildlife Sanctuary, the Limber Wildlife Sanctuary and the Naganari Conservation Reserve in 1987, providing, for the first time in the area, protected refuge for wildlife. The major thrust of the conservation activities of the game reserve under the maharaja centered around the protection of game by deploying game guards and improvement of habitat by providing adequate water and food during crunch times and also natural food through plantation of fruit trees. Lachipora Wildlife Sanctuary continued to be with the territorial forest division until 2008when it was finally transferred to the Department of Wildlife Protection, J&K and was not managed by the Department of Wildlife Protection. However, Limber got the first management plan was by Baba (2005) for 2006-2010 and the recent plan by Kaul et al. (2014) for 2014-2019. Recently the core of these Sanctuaries was notified as Kazinag NP, which is interestingly very close to demarcation done by Maharaja for the game reserve (Ahmad, Pers.Obser). The first management plan for KNP and Lachipora WLS was prepared recently (Kaul et al.2014) for 2014-2019.

Firewood harvest and collection

Firewood has beenharvested by the villages on the periphery of the park and the. The prominent villages are Lachipora, Limber, Babagail, Budroli, and the local population extracts firewood from within the forests of the sanctuaries. Details of the firewood extracted are provided in resource section in next chapter.

Non wood forest produce (NTFP) collection

The main non wood forest produce is the morels (*Morchela* sp.) harvested in spring which is highly priced, especially when dried. It is considered a delicacy and has high demand in the north India. The important medicinal plants such as saussurea, Jurinea are extracted for commercial purpose. Other lesser products include honey and medicinal plants (for local use).

3.ii Forest Protection

Legal status

Prior to 1987, the area was a 'game reserve' which was upgraded to wildlife sanctuary and conservation reserve. The rest of the area was part of the Kathai Range and was managed under the territorial division under various working plans (see above). The core of the three protected areasLachipora WLS, Limber WLS and Naganari CR was upgraded as Kazinag NP.

Hunting

As stated earlier, the areawas preserved as a game reserve for the Maharaja until 1948 but continued to be protected as a game reserve till 1987 although by then hunting for most species was regulated under the J&K wildlife protection act of 1978. Under this act, selective permission to hunt some species of wildlife was given by the Chief Wildlife Warden. Same applied to other parts of the Kazinag NP where selective hunting, especially of black bear was permitted. However, after the creation of the sanctuaries in 1987 and the revision of the J&K Wildlife Protection Act in 2002, all forms of hunting were banned and at present in governed under Wildlife Protection Act 1972 after conversion of J&K in the Union Territory.

3.iii Poaching and other illegal activities

Poaching

Poaching of wildlife species, especially markhor, musk deer and pheasants was rampant, prior to the declaration of the area as wildlife sanctuaries. Poaching for larger mammals was done, using guns and other means. The poaching still continues but has been curbed to a large extent. In winters, when the wild ungulates like markhor and goraldescended to the lower altitudes due to snow, they used to be clubbed to death by groups of local people. This activity continued till 2008, though at a lesser scale but is now rare.

Illegal cutting of trees

Within the boundaries of the protected areas, illegal felling of trees has been contained to a great extent. Some up rooted, dry fallen trees may be utilized for development works in the past. The practice has now been stopped.

Domestic livestock grazing

Two types of livestock are grazed in the National Park. These are the local domestic livestock belonging to the villagers living in the peripheral areas like Limber, Babgail, Lachipora etc. Cattle, buffalos and sheep are the main animals that are grazed. These animals are grazed within a radius of 3-5 km of the village and mostly in the grasslands and forested areas. The livestock generally return to the homestead in the evenings.

However, a greater threat to wildlife is posed by the migrant flocks that visit the alpine pastures (Core area) in summers. In parts of Himachal Pradesh, livestock grazing has been implicated as one of the key competitors for mountain ungulates (Mishra et al. 2002; Bagchi et al. 2004). Threats from livestock in these areas have also beed reported to negatively impact the wild ungulates like markhor due to disturbance and resource competition (Ahmad 2014). Initially only about five thousand livestock was grazing in the area, but now the livestock numbers have almost tripled. According to previous study, 15,000 livestock graze in Kazinag NP every year and) (Ahmad et al. 2010).The main reason for the increase in livestock is that the Bakkarwalsnow bring large number of livestock from villages outside the protected areas herders to use these areas and earn cash in return. These Bakkarwals used to stay at Viji and only livestock was grazed in the area which is near the core .Additionally, the Shepherds from Rafiabad also bring large number of livestock and stay at Viji but use the alpine area of KNP. Areas like Malangan nalla were freed from livestock grazing during militancy but Bakkarwals have resumed usingthem. Sometimes new Bakkarwals try to enter into these areas which may increase the threat. Other than the competition for resources, pathological transmission through livestock might also be an influential consideration.Preliminary results of a recent study suggest parasite infestation in markhor (Mehraj et al. in review).

3.iv Wild fires

The incidents of fire have now increased than the past when fires occurred occasionally. The reason is probably the disturbance and presence of herders, NTFP collectors and army porters. Few recent forest fires in Malangan nalla, and Limber nalla caused by army porters and NTFP collectors damaged large extants of forest and scrub vegetation.

3.v Wildlife health

No wildlife diseases was reported till recently because no screening has been done. The recent study has indicated the presence of parasites in the markhor (Mehraj et al. in review; Bhat et al. in review), but more detailed

work is needed to establish the scale and seriousness of the issue. However not many pathological studies on cattle have been conducted in Kashmir valley so far and a recent study identified *Haemonchus, Trichus, Oesophogostmum, Chibertia* and *coccidia* are prevalent in Baramulla district (Bhat et.al.2021) and in the livestock grazing in Hirpora WLS (Bhat et al.2019). Most of nematode parasites and *coccidia* are the major causes of parasitic disease of goats in subtropical and temperate climates (Lone *et al.* 2011) and in Kaigah (PoK), enterotoxaemia was reported in domestic goats that could transfer to markhor (Nawaz 2002).

3.vi Interagency programmes and problems

Generally, within protected areas, development programmes of agencies other than forest/wildlife departments are difficult to implement largely because construction activities are not allowed. However, in the Kazinag NP, human habitations are located outside the boundaries of the NP and fall under the ambit of various government schemes through departments of education, rural development, social welfare and animal husbandry. WTI and WLP have been facilitating programmes like UJWALLA and NRLM in the fringe villages of Kazinag NP to link these villages with welfare schemes to benefit the people and reduce pressure on the PA. There is also a provision of eco-development, which needs to be tapped in a better way.

3.vii Eco-Tourism

Although this area has tremendous potential for wildlife tourism, being a place which affords very good sighting of wild animals including many threatened species, the area does not receive tourists. The reasons being importantly the law and order situation over the last two decades and it being close to the line of control.

3.viii Research and Monitoring

Most of the researches conducted in Kazinag NP have been in the form of short duration surveys for galliformes (Kaul 1986, 1989, Kaul and Ahmad 2007; Ahmad et al.2016) birdsurveys (Javed 2002). Surveys for plants have also been conducted by researchers of University of Kashmir and now by Ahmad (2014) and the plant list is appended. The first detailed survey for markhor was conducted in 2004-05 by Baba & Suhail and Ranjitsinh et al.(2005) which led to long term studies on the ecology of markhor (Bhatnagar et al. 2008, Ahmad et al. 2010; Ahmad 2014, Ahmad et al.2016). Studies on goral were conducted recently by the university of Kashmir (Jahangir et al. 2019).

3.ix Training

Not many training programmes have been held in Kazinag NP,Lachipora & Limber Wildlife Sanctuary. WTI held an anti-poaching and legal training for the frontline staff of Kazinag in the year 2009 and human-wildlife conflict training in 2016.The training of staff is imported but it will not suffice the requirement.

3.2 Present management practices in Kazinag NP

This is the 2nd management plan for the KNPas well as for Lachipora & Limber Wildlife Sanctuary.Annual Plan of Operations (APO) form the guiding document for the management of the PA.

3.2.i. Administrative set up and organization structure

The Protected areasare under the jurisdiction of the Department of Wildlife Protection with its headquarters at Sopore, Baramulla district. At present protected area managed through a Wildlife Warden (North Kashmir), one Range Officer presently based at Baramulla. There is no separate staff for Kazinag NP but is being managed by the staff(6in number)that manages the LimberWLS and Lachipora WLS.

3.2.ii. Habitat management

The major problems regarding habitat management include livestock grazing, fuel wood extraction, NTFP extraction,forest fires, and other anthropogenic pressuresespecially related to security issues due to closeness to LoC.

The Park has about 10 villages in its vicinityand all use fuelwood for heating and cooking. Since the area is temperate, the harsh winters and heavy snowfall forces people to use huge quantities of fuelwood for heating purposes. Locals also have bahaks/dokes inside the park where they go during summer. However, this tradition is slowly vanishing. But migratory herders and shepherds have increased after 2000 as the situation improved. This may result in habitat degradation. Certain areas around the herder camps have got weeds growing perhaps due to heavy grazing.

NTFP extraction is another issue for the habitat management. The locals and herders extract Morchilla and medicinal plants from the area. The Morchilla and medicinal plants are sold at good prices, thus are in demand. The extraction of fodder is also done from few of the pastures by the locals to stall fed their livestock. The twigs of horse chestnut are also cut and kept for stall feeding in winter at certain location of the Park.

Frequent forest firesrecently due to dry weather and human interferencealso damage some parts of the area.

3.2.iii. Protection

The patrolling units are beats and Forester commands the patrolling in protected areas that are frequently patrolled include areas that are closer to motorable road heads, However, patrolling intensified during the grazing season in summer or during the vulnerable period of poaching.The meager staff strength, poor infrastructure, lack of capacity and young staffare some of the hurdles for regular and complete patrolling of the area. Furthermore staff has follow specific format to collect information while patrolling.

The first plan was in place during 2014-19. There isno functional checkpost and Communication system is week in certain areas because some of the areas are not linked with mobile network even now. Due to closeness to LoC, wireless communication system is not an option. There are anti-poaching camps, shelter shed or watch tower within the protected areas.The boundaries have been recently demarcated to large extent & pillarsfixed at some locations. The pillar construction along the boundary near human habitation would be critical to stop any encroachment.

3.2.iv. Human Resource:

There was no extra staffdeploymentof frontline staff after the notification of National Park. The staff that has been catering the Lachipora and Limber sanctuaries is actually also taking care of the NP. This is the biggest concern. The area is highly mountainous and patrolling needs atleast 3 people in one team along one nalla. The Park is under the administrative control of a Wildlife Warden at division level.

3.2.v Eco-development:

Local communities form an integral part of the entire Himalayan landscape. Thus, to know about their numbers, dependence, issues and aspirations help in better implementation.

There are 10 permanent villages on the fringes of the Park with more than 1000 families and about 6500 population. Not much has been done towards implementing eco-development activities in these villages to reduce their dependence and win the support for conservation.The profile ofthese villages is given in the table 3.2.

Table 3.2. Profile of fringe villages of Kazinag NP

Village	No. of house holds	Population	Ave.Fuel wood extraction / household/yr (in kgs)	Ave.Morchella (Guchi)/ household/yr (in kgs)	Ave.Fern collection /per household/yr (in kgs)
Babagail	81	431	3100	0.09	0.43
Bodrali	101	535	1100	0.16	0.74
Chullan	100	555	3000	0.15	1.5
Limber	194	1041	2600	0.08	0.77
Lachipora(A)	199	1251	2900	0.08	0.56
Lachipora(B)	197	1229	2900	0.03	0.2
Hakpatri	112	793	1100	0.005	2.68
Hillen	112	604	700	0	0.16

(Source WTI)

3.2.vi Eco-tourism:

The Park has beautiful vast alpine meadows on top with rich conifer and broad leaf forests below the alpine system. Most of the area is drained by clean and cold snow fed streams. Generally local tourists visit the alpine meadows in summer. The area is also the best area for sighting markhor in India and quite a few national and international wildlife photographers and enthusiasts have visited the area in last one decade. The area is also one of the best areas for pheasants with a good population of threatened western tragopan and cheer (Ahmad et 2016, Ahmad 2017). The other charismatic Western Himalayan flora and fauna include deodar, fir and Betula, Saussurea, Kashmir musk deer, Himalayan brown bear, Himalayan goral, Himalayan snowcock and golden eagle. In addition to these attributes, the Park is also known for its spectacular beauty of snow-clad mountains, fast-flowing mountain streams. There is no eco-tourism zone identified and demarcated yet.

3.2.vii Research and monitoring:

The majestic mammal assemblage attracted the early hunters and explorers, whose accounts form the baseline information for the mammals of Jammu and Kashmir (Burrard 1925, Stockley 1936). These old accounts are the source of historic distribution of important species such as markhor and brown bear. The rich bird assemblage especially pheasants has been explored from 1980s (cheer (Kaul 1989,Javed 1989; Ahmad et al. 2016). The detailed research got attention only recently when Wildlife Trust of India, Nature Conservation Foundation and Department of Wildlife Protection initiated work on markhor, goral, musk deer and western tragopan(Bhatnagar 2009; Ahmad 2014, Ahmad et al. 2015; Ahmad et al. 2016; Ahmad et al. 2017). The University of Kashmir has also initiated work on goral and pheasants recently.

3.2viii. Communication

Communication is the backbone of park management and a quick response from the park management can only be accomplished if communications (both spoken) as well as movement is good. Due to insurgency, the park staff do not possess wireless communication devices as in other parts of the country but rely on GSM based mobile phones which are largely personal. However, mobile signals do not cover the whole park and this device is operational only towards the fringes. Thus a survey or a patrolling party may

not be able to communicate with the headquarters or the base station regularly.

Being mountainous, the protected area does not have a network of roads on which vehicular traffic can move. Therefore, the staff has to rely on either the few all weather roads at lower altitudes to reach the foot hills from where they can access areas on foot by using the network of bridle or foot paths. The network of trails within the protected area allows movement and access to various areas of the park. Being generally rugged, the trails are feeble and may fall into a state of disrepair very quickly.

3.2.ix. Other constraints to management

Logistics and infrastructure

Lack of infrastructure and logistic support restricts the staff and researchers to work properly in harsh and tough conditions of the protected area. The present staff is suffering from scarcity of infrastructure and equipments. The residential quarters, inspection hut, watchtower, proper camping gear for winter patrolling, rain/snow sheds, vehicle and telecommunication equipments (wireless) are required for proper management. However, in the same terrain and conditions, locals and migratory herders spend months together in the upper reaches in simple mud huts.

Capacity and training

Very few capacity building and training programmes have been offeredto the staff. These are essential for enhancing knowledge and awareness among the wildlife staff and keep them motivated. The training and awareness regarding wildlife crime and filing of cases is crucial for the frontline staff to do their job properly and help to improve the conviction rates of criminals.

3.2.x Past Works

Glimpses of the works done during last few years for development of the Kazinag National Park, Limber, Lachipora Wildlife Sanctuary and Naganari Conservation Reserve.



Chainlink Fencing at Babagail (Kazinag national park)



Chainlink Fencing at Babagail Limber Wildlife Sanctuary



After work penling fencing CO(8) Lachipora







Staff Quarter at Tawrian

Limber Wildlife Sanctuary





Crate wire bunding at Abnar Nallah (Limber Wildlife sanctuary)





DRSM Works at Mundar Nallah (Limber Wildlife sanctuary)

DRSM works at .(Lachipora Wildlife Sanctuary)



Plantation at Limber after work



Foot Bridge for Patrolling



Range Office Baramulla





Watch tower at Tawdiyan Limber

Chapter 4

PRESENT MANAGEMENT PROBLEMS AND THREATS TO WILDLIFE

Historically, the timber was given on sale through timber sale depo. The animals like markhor were hunted for trophy. The medicinal plants were auctioned just before the area was notified as a PA. Wild animals were poached till recently for meat and illegal trade. The extraction of fuel wood and other NTFP continues. Livestock grazing, especially from migratory herders and the local shepherds is happening. The build up and military activities due to LoC also creates disturbance.

Recent work has shown that uncontrolled livestock grazing in the PA is a major threat to markhor as livestock occupies quality habitats and creates huge disturbance during the critical periods of fawning and lactating (Ahmad 2014). The commercial use of pastures by renting them out or by bringing livestock of others just to earn money, has resulted in overgrazing and disturbance in many parts of the PA including critical markhor habitats.

There are about 10 villagesaround the NP and they extract resources such as fuelwood, NTFP and timber. They also graze livestock in the Park and many of them have also been involved in poaching as they keep licensed or without licensed guns.

Specific problems are discussed as under:

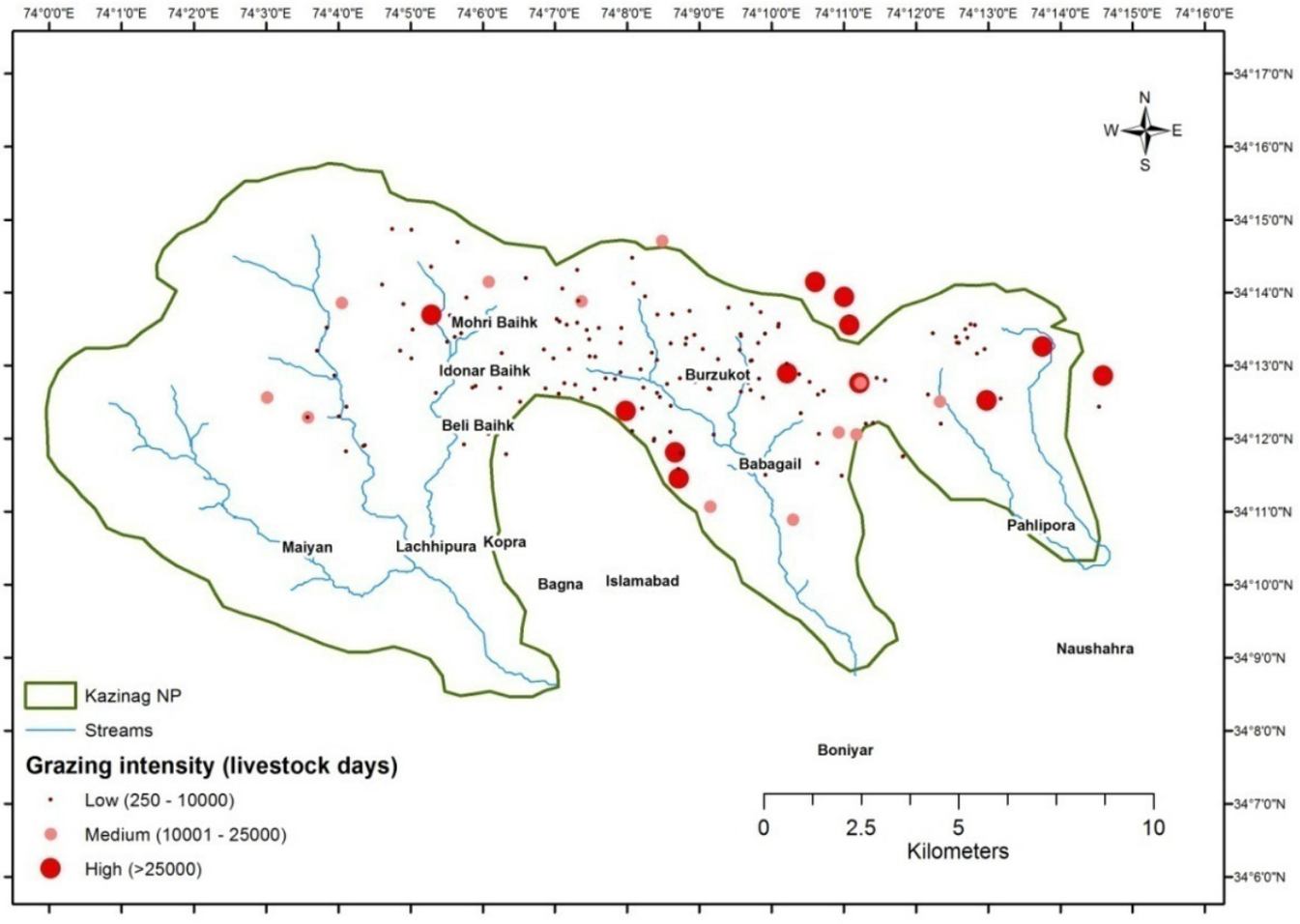
4. i. Livestock grazing

Protected areas receives livestock from fringe villages, shepherds and migratory herders. A greater threat to wildlife is posed by the migrant flocks and shepherds that visit the alpine pastures (National Park) in summers. The migratory bakkarwals possess large number of livestock, which is main source of their livelihood and they take advantage of seasonal variations in forage availability and pleasant weather across the Pir Panjal range including Kazinag (Ranjitsinh et al. 2006; Ahmad 2014). Shepherds collect large number of sheep from neighbouring villagesto graze them in the alpine pastures of Kazinag NP in toget cash and kind in exchange. Kazinag NP receives about 15000 sheep and goats from shepherdsand migratory herders and about 2000 cattle from locals. The local and migratory herders occupy the region between May to September (Ahmad et al. 2010). However, the livestock from migratory herders (Bakkarwals) and Shepherds may pose threat to markhor and musk deer as the Bakkarwals and Shepherds show high overlap with the markhor and musk deer habitats in middle and higher elevations (Ahmad 2014). The local cattle and buffaloes use lower and flatter areas, which

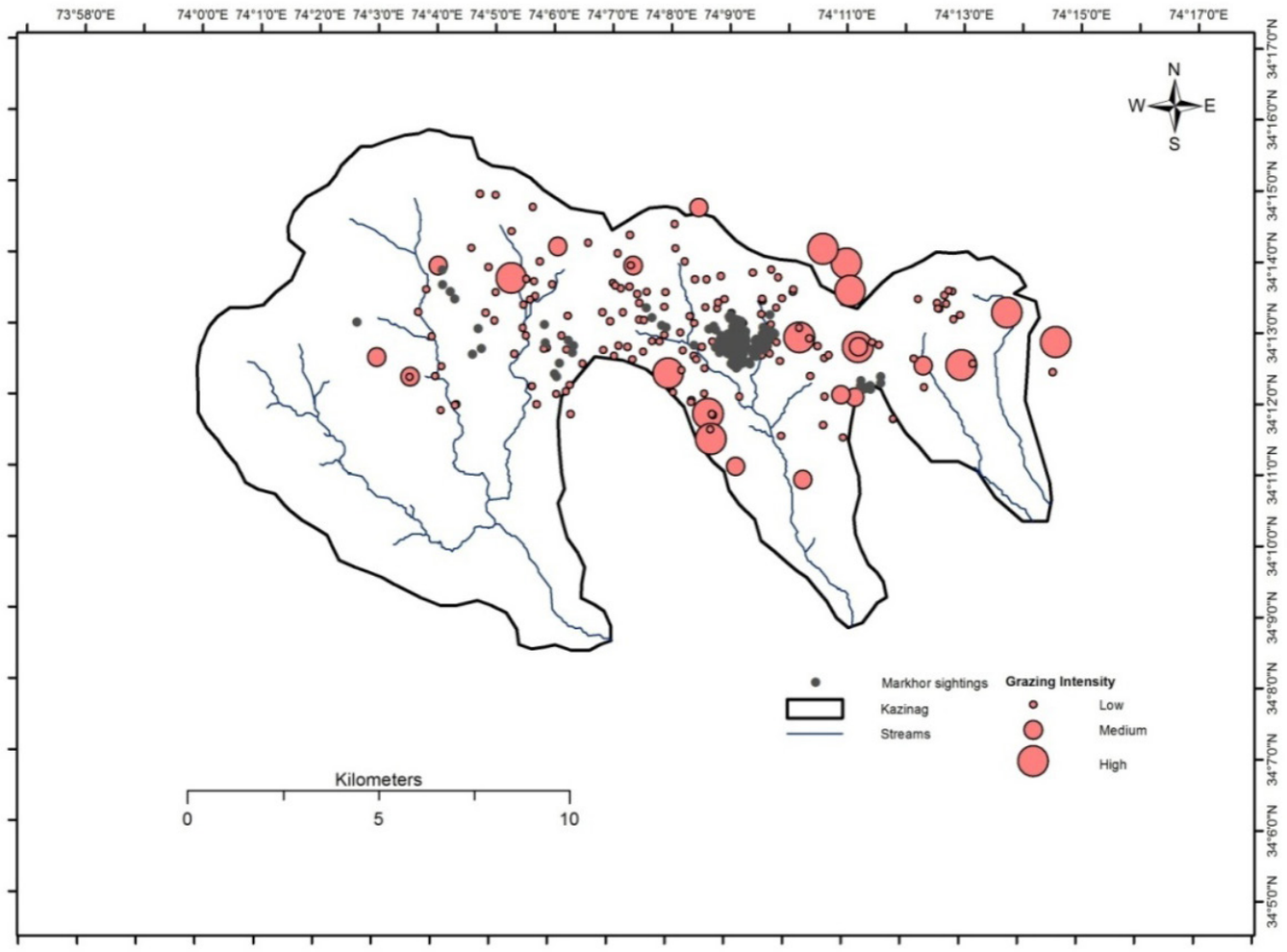
are used to a lesser extent by wild ungulates like markhor and musk deer (Ahmad, Pers.Obser).

Average size of livestock herd was estimated as 442±17 (ranging from 25-850) in 2009 when migratory livestock herds were encountered in 150 occasions spreading over the entire accessible areas of the protected areas. Estimated impact of livestock grazing in terms of livestock days (herd size × duration of stay inside the National Park) was ranged from 250-850 which was divided into three categories (low, medium and high) and plotted over the National Park map (Figure 4.1). The spread of high impact livestock grazing (>2500 livestock days) were concentrated in some particular places whereas medium to low impact grazing were spread throughout the entire protected area.

A veryhigh livestock intensity was recorded as 37,059 SU/km2 by migratory herders (Bhatnagar et al. 2008). The local herders belong to nearby valley of Limber, Lachipora and Hillon-Hakapathri. The recent study shows that markhor avoid the habitats with moderate to heavy livestock presence. Markhor do not show summer migration where summer habitats were occupied by livestock and females did not migrate (Ahmad 2014). The presence of livestock negatively affects the available forage and habitat for markhor ultimately hinders the nutrition level in the season of parturition and lactation (Ahmed et al. 2010). Marhkor distribution seems to be away from heavily livestock grazed areas in the entire Kazinag National Park, likely indicating avoidance of heavily grazed areas (Figure 4. 2). Furthermore, recent observations indicate livestock with infectious diseases like foot and mouth use even the critical markhor habitats. Thus the need to intervene to protect markhor habitats from livestock menace.At present number seems to be within carrying capacity.



Grazing intensity of migrant flocks expressed in terms of livestock days in Kazinag National Park, Lachipora & Limber Wildlife Sanctuary.(Source WTI)



Spatial distribution of markhor sighting locations and livestock grazing intensity in Kazinag National Park, Lachipora & Limber Wildlife Sanctuary. (Source WTI)

4.ii.Non Timber Forest Products (NTFP) collection

Gucchi and medicinal plants: The extraction of gucchi mushroom (Morchella sp.), mostly influence the livelihood of people around the park. The local people at some places go inside the PA to collect the highly valued mushroom and medicinal plants (Ranjitsinh et al. 2006; Ahmad 2014). In the fringe villages of Babagail and Bodrali the collection of NTFP from Kazinag NP is overall produce Rs. 353,000/- earning for local villagers (Table 4.2). It's almost about 55% of income for them (Bhatnagar et al. 2008). However, it has shown a reduction in the recent years (Sameer et al. 2019).

According to Bhatnagar et al. 2008, a preliminary study in a part of of Kazinag NP (earlier the part of Limber WLS), the income in the area shows that most of the income comes from non- timber forest produce such as the gucchi mushrooms, medicinal plants and walnut, together accounting for 70% annually. Animal products such as meat and milk products come in context, followed by employment. NTFP extraction is the primary need along with some amount of grazing rights. But when taken all the fringe villages, following occupation profile was documented

Major occupation/sources of income people in the fringes of Kazinag NP, Lachipora & Limber WLS.(Source WTI)

	Occupation/Source of income
1.	Labour
2.	agriculture/horticulture
3.	Livestock rearing
4.	Govt. Employment
5.	Others (carpenter, driver)

Firewood extraction: Local people and migratory herders as well as defense forces extract firewood mainly for cooking and to keep warmth in winters (Ranjitsinh et al. 2006; Ahmad 2014; Sameer et.al.2019). There are 10 villages around the Park with more than 1000 households and each household on average extract 2175kgs/yr. Migratory herdersalso lit fire during night to ward off wild carnivores during from predating their livestock.

4.iii.Poaching

A large number of mammals and Galliformes are hunted in the western Himalaya and many of these are of conservation anxiety (Kaul et al. 2004, Fuller & Garson 2000). During winters community poaching used to occur where group of 15-20 locals would go and cordoned off an area to catch the markhor and goral in deep snow. The local poachers would establish hunting camps to kill musk deer, black bear, leopard during summers. Species like brown bear, black bear and leopard were also killed for killing livestock. Poaching has been also by the locals who with their livestock go on the sub-alpine and alpine pasture and get involved in poaching. The excessive poaching of markhor, musk deer, goral and pheasants inKazinag declined only recently when all the area was taken over by the Wildlife Department and conservation work (through markhor project) was started by WTI and WLP. However poaching still continues though at a lower scale as terrain is tough and dearth of staff.

4.iv. Forest fire

Fire is the major cause of disturbance and change in several ecosystems. The high aerosol load in the Indo-Ganges, including the Himalayan region, is well documented (reviewed in Vadrevu et al. 2012). In Kazinag,Limber,Lachipora,the forest fire incidents seem to have increased due to the dry weather during last one decade and more human interference in the area. Autumn season is the period with high probability of forest fire because of the dry ground cover and dry fallen leaves. Forest fires also occur during spring when locals go for the collection of Morchilla and sometimes burn down the grasslands. The presence of army porters inside the forest has also been reported to cause forest fires during dry season

4.v Invasive and weeds

The Alien species are non-native or exotic organisms that occur outside their natural adapted ranges and dispersal potential. Invasive species cause loss of biodiversity including species extinctions, changes in hydrology and ecosystem function (McGeoh et al. 2010). A total of 190 species distributed in 112 genera and 47 families recorded as invasive alien in the flora of Indian Himalayan Region (Sekar 2012). Excessive grazing and habitat fragmentation is reported to spread the weed infestation in limber & lachipora which has been grazed by livestock which may have increased weed infestation. However, studies to document such infestation in Kazinag are lacking. But some areas especially with herder camps have grown weeds.

4 vi. Mining

In India, gypsum mining is mainly carried out in the state of Rajasthan, which contributes about 99% of the total production; the remaining 1% is contributed by Jammu and Kashmir and Gujarat (Anonymous 2004). There are heavy deposits of Gypsum and limestone neighboring the river Jhelum (Raza et al. 1978). The mining of gypsum and limestone is outside the buffer zone of the National Park and in lachipora before taking over the area from forest department.After taking over the national park, the gypsum mines which were falling inside the national park were stopped.It could be a major threat for upcoming years, if not restricted/confined to extend towards the Park boundary(Bhatnagar *et al*. 2009, Ahmad *pers. comm.*). The eco-sensitive zone notification has been published which can assist department to control Gypsum Mining.

4 iv .Border fencing and insurgency

The area is demarcated as the line of control (LoC)between India and Pakistan and volatile situation along the LoC has resulted in the erection of a fence. This fencing on the border may influence the movement and gene flow of animals with both countries (Ranjitsinh *et al.* 2005; Bhatnagar 20109; Ahmad 2014). Unintentionally insurgency related issues also disturb the Park area. Animals can also entangle in such a fence and die.The PA has been disturbed due to insurgency and border skirmishes which have resulted in huge presence and movement of military and machinery.

4 Vii. Human-wildlife conflict

In the fringes of Kazinag, crop damage by Rhesus monkey and black bears has become an issue of concern. During autumn season (Sept-Oct), black Bear and monkeys raid the maize crops when the crop is ready. While as the monkeys cause damage during day, the black bear during night. These two wild animals cause massive crop damage in their maize fields. Monkeys also destroy walnuts and vegetables during other months. Himalayan langur has also been recently reported to inflict damage especially to walnuts. During spring season animals like langur and monkey damage the green/fresh crop of walnuts also.During our consultation with communities it was found that people don't harbour any hatred and disliking towards wild animals perse but the quantum of loss which people suffer through crop damage is the major factor responsible for negative attitude towards wildlife, so reducing crop damage could have a strong positive effect.

Livestock depredation is one morecause of human and wildlife conflict though not serious. It is recorded that common leopard and black bear attacks on livestock in the Kazinag NP (Ahmad *pers.observ.*), Limber & lachipora.There have been a few injuries to humans by black bears in the adjacent area but conflict related to Common leopard and Black bear killing and injuring people is a serious issue in the other parts of north Kashmir including Baramulla district (Choudhury *et al.* 2008) (see Annexure).

4.ix. Disease Transmission

Wild animals can get diseases from the domestic livestock grazing in the PA**.** There is an evidence of livestock affecting wild ungulate health in Dachigam National Park. In 1977, a captive Hangul in Dachigam National Park died of

the Johne's disease, which had affected few sheep of the Dachigam breeding farm (Kurt, 1978). A preliminary study in Kazinag has indicated a presence of parasites in markhor (Bashir et al. Unpublished). During the summer markhor habitats was reported. Preventive measures to reduce the chances of wildlife being affected needs to be taken.

4.x Human resource

No extra staff was posted/recruited after the area was upgraded as NP. Therefore, there is extreme dearthof staff to manage/protect the NP effectively. Presently the staff that was posted for Lachipora and Limber WLS also takes care of the KNP.

List enclosed Annexure

Human Death & Injury Details

S.No	Year	Death	Injury
1	2015-16	01	102
2	2016-17	03	49
3	2017-18	02	34
4	2018-19	01	23
5	2019-20	02	60
6	2020-21	01	42
	Total	10	310

Source Wildlife Warden North





Major anthropogenic interference in Kazinag National Park—Firewood extraction and Livestock grazing

Chapter 5

PROPOSED MANAGEMENT

Goal, Objectives and Management

The Kazinag National Park, Limber &lachipora an archetype for the conservation of the Himalayan flora and fauna, harbours certain animal species that are globally threatened with extinction and serve as excellent flagships for conservation of high altitude ecosystems. Such species are glamorous and have the public appeal to serve as symbols of conservation. Kazinag has the globally threatened markhor, the largest wild goat, besides the musk deer, the two species of bear and an excellent population of pheasants including the threatened western tragopan. Thus Kazinag NP has a lot to offer in terms of species conservation and any plan formulated must address issues of concern to all these species using the markhor as the flagship.

The goal therefore assumes that by protecting markhor and its key habitats, other important species contained in the area would get protection. The strategy to achieve this is to strengthen the protection measures whereas at the same time involve the local communities in such initiatives so that they see benefits accruing to them as a result of the park.

To protect Markhor as a flagship for the conservation of other endangered flora and fauna of Kazinag National Park.

The goal can be achieved by several ways includes improved patrolling to reduce or stop poaching, protect the habitat by removing or regulating pressures on the habitats like grazing, biomass extraction,fires and at the same time restoring habitats by arresting soil erosion and regenerating grasslands to produce fodder for wild animals.

While all these activities are necessary, the poaching cannot be reduced without patrolling which means more and better trained staff, who have the necessary equipment and the inspection paths and night halts to perform their duties. Similarly, habitats cannot be protected unless alternatives are provided to the present users. The impact of all the activities must then be assessed by periodic animal counts so that trends of populations and changes can be detected and corrected if necessary.

5.1. The Vision

The management aspires to conserve the unique and threatened assemblage of flora, fauna along with theircritical habitats to ensure long term conservation of the ecosystem for the flow of ecosystem services in the region.

5.2. The management goals of the National Park largely aim at contributing towards meeting the following Goals of India's National Wildlife Action Plan (2017-31);

- Conservation of threatened species
- Control of poaching and illegal trade in wildlife
- Controlling NTFP collection, livestockgrazing
- Encourage people's participation in wildlife conservation
- Development of human resources
- Strengthening research and monitoring

5.2. Objectives of Management

To meet the management goals following objectives have been stipulated for the plan period i.e. 2021-2031;

1. To assess the threats to threatened species, such as markhor, musk deer, goral,brown bear, western tragopan, cheer and provide management prescriptions
2. To understand the population dynamics of markhor in Kazinag
3. To ensure that Markhor,musk deer and other threatened species including pheasants of protected areas from poaching.
4. To ensure that habitats within Kazinag NP are amenable to long term sustenance of markhor and other important species found therein.

5. To map and quantify the anthropogenic pressure and reduce anthropogenic pressure especially the livestock grazing and extraction of fuelwood,medicinal plants and other NTFP
6. To restore and rejuvenate habitats especially alpine pastures and critical Markhor habitats by releasing them from livestock and other anthropogenic pressures
7. To assess the status and threats of rare medicinal plants such as Trillium, Saussurea costus, Aconitumand plan their restoration
8. To understand the human-wildlife conflict due to crop depredation by wild animals in the fringes of NPand prescribe interventions to avoid the retaliatory killings of the wild animals and the loss to property.
9. Engage with the fringe communities to control poaching, NTFP collection, livestock grazing and conflict
10. To undertake eco-development activities in fringe areas (by consulting the microplan for Kazinag) for reducing the dependence of people on natural resources of the NP and generating goodwill of locals.
11. To protect the PA against encroachment and take measures to stop non-compatible land-use in the eco-sensitive zone
12. To facilitate controlled eco-tourism for the benefits of the local communities and awareness generation of visitors
13. To ensure capacity building of the frontline staff for effective enforcement, apart from staff development and staff welfare measures
14. To improve infrastructure and human resource to strengthen protection and surveillance
15. To facilitate and undertake long-term and short-term basic and applied research programme by coordinating with various local and national institutions/organisations.
16. To engage with security forces to contain poaching, wild fires and non-bonafide herders.

5.3. Issues and problems in achieving the objectives

Key limiting factors, which restricts the desirable pace of management practices, are as below;

- Shortage of staff and inadequate infrastructure to implement management activities
- Lack of quality infrastructure facilities for staff
- Inadequate and late budgetary allocations
- High anthropogenic pressure and extraction of fuelwood and other NTFP
- High pressure of unsustainable livestock on the alpine pastures and other habitats
- Presence of livestock pose danger of contagious diseases in wild ungulates
- Heavy military presence due to LoC
- Lack of proper exposure training of staff and field functionaries
- Weak intelligence network.
- Poor patrolling and following of patrolling formats

5.4 SWOT Analysis

The **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats to KNP have been worked out as below;

Strengths

1. Biodiversity rich area-Markhor musk deer, goral, brown bear, western tragopan, *Saussurea costus*, *Aconitum,*
2. Largest population of Markhor in India
3. Contiguous landscape with other wildlife rich areas such as Lachipora and limber PAs and Bangus-Shamshbari

Weaknesses

1. Recently upgraded, thus meagre staff and poor infrastructure
2. Inadequate enforcement due to shortage of staff and lack of skills
3. Despite being one of the most important protected areas in Kashmir, it is not much popular.
4. This is just 2nd management plan, hence poorly planned management in last decade
5. Closeness to LoC

Opportunities

1. Conserve the rare and threatened wildlife
2. Save the largest Markhor population in India
3. High scope of research and monitoring
4. High scope of eco-development and community participation
5. Scope to work with army to conserve the area.

Threats

1. Poaching
2. Livestockgrazing pressure on the alpine and subalpine habitats
3. Extraction of NTFPs especially fuelwood and Morchilla
4. Disturbance due to closeness to LoC.

Chapter 6

MANAGEMENT STRATEGIES

Kazinag National park along with lachipora &limber harboursthe largest markhor population in India and is one of the only two viable populations in J&K. Kazinag is probably the best PA for musk deer, goral and western tragapon populations in J&K. The rich plant wealth including medicinal plants, vast alpine meadows and dense birch stands make it a distinguishable area.

Management actions aiming at protection of wildlife against natural and man-made ecosystem stressors such as poaching, resource exploitation, infestation of weeds, livestock grazing, soil erosion etc. would be undertaken. Following are the key principles of management strategies for the Park.

- **Restorative strategy:** Restoration of habitat attributes lost over time, such as revival of meadows, controlling weeds to restore potential of a site, soil conservation work to restore catchment functions, restoration of water bodies, restoration of forest etc. The techniques of restoration would be such that it is acceptable on aesthetic, economic, environmental or ecological considerations and as 'near natural' as possible (Sawarkar, 2005) e.g. restoration of degraded habitats should not be attempted by planting exotics; weed control should not be attempted by using weedicide; restoration of natural water bodies instead of creating artificial water holes etc.

- **Compensatory strategy:** It would seek to compensate loss of habitat attributes for various reasons, as in case of the Park: reducing dependence of locals for fuel and other NTFP, stopping graziers on alpine and subalpine meadows. Eco-development measures in the fringe villages, grazing regulation, sustainable eco-tourism are some of the compensatory strategies.

Actions under compensatory strategies need not necessarily be within the management area. Some of these actions need/ might need to be taken outside the PA to reduce pressure on management area.

6.1 Boundaries

Demarcation of the external as well as internal boundaries of the NP will be important for management. Demarcation and mapping of internal boundaries such as blocks and compartments shall be done for the purpose of management actions and monitoring. Demarcation and mapping of tourism zone and routes inside the sanctuary will help regulating tourism in the area. Map of eco-sensitive zone of the sanctuary be created and land-use and land-cover class, location of villages, ecologically sensitive areas (such as water bodies, wildlife corridors) etc. within the zone would be depicted.

6.2 Zonation and Theme Plans

Since it is difficult to design a standard management practice to be implemented throughout the landscape, it would be practical to adopt zone and theme approach of management. Following three zones are proposed: Conservation zone; Eco-development Zone; and Eco-tourism Zone. Details of the Zones are as below;
Conservation Zone: The zone would cover the entire NP except the tourism zone.
Eco-development Zone: The zone would be outside the boundary of the NP within one km of the PA boundary.
Eco-tourism Zone: The area from Hillon- Gabewar-Viji-Nagadori- Babagail can be set as the Eco-tourism Zone.

The NPwould be managed as per separate sub-plans or Theme Plans, the critical building block of the manage-

ment plan, given below.

i. Habitat management
ii. Protection
iii. Restoration of the wild medicinal plants
iv. Eco-development
v. Eco-tourism
vi. Research and monitoring
vii. Management of human-wildlife interface
viii. Extension and awareness
ix. Maintenance and development of infrastructure
x. Human resource
xi. Monitoring and Evalvation

6.3 Habitat management

Objective

Protect, restore and manage important habitats for the threatened and endemic wildlife in the KNP
Habitat management is one of the key components to conserve the threatened species. Mapping habitats for the different species and identifying and quantifying threats to these habitats would be prerequisite to manage the habitats. Identification and protection of important habitats for threatened and endangered wildlife is an important function of a PA manager. For it to be handled effectively, it is essential to first identify the key habitats for the species in question, and then assess the status of these patches. Threats to important animal species may also be assessed to arrive at meaningful solutions. Some of the major threats to key habitats include livestock grazing, fuel wood extraction, NTFP collection, forest fires and disturbance due to LoC. However, quantification and negative impacts of these threats need to be assessed in more detail. Further, the understanding and distribution of these threats would help in the effective mitigation. Recent studies have shown the heavy livestock grazing is a threat to the species like markhor, musk deer and western tragopan (Bhatnagar et al 2009; Ahmad 2014 and Ahmad et al. 2016). The unregulated extraction of fuelwood from the NP by the locals and herders (Sameer et al. 2019), which would degrade the habitats. Suitable restoration activities may be initiated once the areas are identified and issues quantified. For this to be done effectively, causal factors must first be identified through either expert consultations or research (see section on research) and solutions sought so that targeted remedies are suggested.
Particular emphasis must be laid on the proper management of livestock grazing practice and fueldwood extraction so that further degradation of habitats can be prevented. Other activities required for the restoration of habitats include, soil conservation, pasture developments, eradication of weeds, afforestation.
Livestock grazing, fuelwood and Morchilla extraction should get particular management focus to prevent further habitat degradation. Other activities required for the restoration of habitats include forest fire control,prevent soil erosion, retain moisture , pasture developments, eradication of weeds, and afforestation.

6.3 a. Management of livestock: Recent studies across the Himalayas have shown that uncontrolled livestock grazing is a major threat to wild herbivores and their habitat (Mishra 2001, Mishra et al. 2004; Bagchi et al. 2004, Ahmad 2014). Huge livestock presence is one of the key management issues of the KNP and the ungulate assemblage there (Bhatnagar et al. 2009, Ahmad 2014). It should be thus a priority to control the livestock grazing across the important habitats especially the alpine and subalpine habitat and the critical markhor habitats. WLP and WTI have been working in this direction to reduce/regulate the livestock grazing.
Following actions should be taken/continued to address the issue of overgrazing by livestock:

- One of the objectives to upgrade the status of area as NP or sanctuaries was to curtail the livestock grazing, a major threat to the threatened species like markhor, musk deer and the key habitats. Therefore, it should be the first step to restore the habitats. Livestock camps have been reported from the critical markhor habitats also which need to be immediately shifted to buffer zone. Regulating the livestock by stopping non-bonafide herders and reducing the number of livestock with local shepherds. The number of livestock allowed for grazing in the NP by Gujjars and Bakkarwals should be specified based on the actual number of livestock owned by them. For shepherds, it should be only the livestock of the villages who have right and shepherds should come themselves instead of lending the livestock through others. Further the critical habitats that have been identified by WTI and WLP should be protected totally from livestock grazing and grazing in other areas will be regulated on rotation basis.
- In Kazinag, livestock grazing reduces plant biomass by 5 times where closures were fixed to understand the impact.
- Core area of the NP should be made livestock free in the long term by shifting the herders to other adjacent forests, the areas shall be identified in limber and lachipora.

6.4. Pasture development:

Restoration of degraded pastures would be important to restore the habitats for herbivore population in the Park. Following measures would be required to achieve the objective:

- Identification and mapping of the most degraded pastures would be the prerequisite to start the restoration
- Once mapped, livestock grazing has to be stopped in such pastures and scientific interventions are to be initiated.
- Heavily eroded and degraded alpine pastures shall be identified &protected on temporary basis in order to allow recovery and facilitate regeneration of native grasses, herbs and shrubs.

The high yielding seeds of different varieties of grasses shall be sowed in various pastures having high concentration of Wildlife Species like Markhor,Goral,Musk Deer. The alpine pastures like Gabwar, Gamalitter, Tholthelan ,Methwani ,Vigi,

Nelsar ,Gorshan, shall be enriched with high yielding varieties of grasses and shall be protected and monitored

on regular basis.The varity of grasses proposed are Avena Sativa,Vigna spp. ,Mdicago sativa,Trifolium alexandrinum,-Dactylis glomerata,Festuca arundiances,Phalaris aquatic,Phalaris tuberosa,Phleum pratense,Bromus unioloides,,-Featuca rubra,Lolium perenne,Trifolium repens,Trifolium pratense,Onobrychis viciifolia etc,

6.5. Removal of unwanted weeds:

Increased livestock pressure lack of scientific management of habitats/grasslands increase infestation of unwanted weed species affecting the herbage production and rendering the habitat quality poor. Keekar gali, Mohur, Lren, Hedebal, lachidona top Dade are infested with weed species. Palatable species of grasses and legumes in the pastures are predominantly replaced by noxious weeds like Rumex, Cirsium, Stipa, Sambucus, Sibbaldia, Sonchal (Malva sylvestris), Van Palak etc. Management of invasive and unwanted species would require following measures to be implemented;

- **Mapping of the weed infested areas in the NP:** The weed infested areas should be systematically surveyed and mapped to know the extent of infestation.
- **Phenology of weed species:** Phenology of the weed species should be compiled/studied to decide the time/season for employing control measures.
- **De-weeding:** The unwanted species should be manually uprooted before flowering starts. In due course of up-rooting the native and palatable species should be disturbed to a minimal extent.
- **Monitoring of the weed cleared sites:** The abundance of weed species should be monitored before and after the removal operations to assess the success of the de-weeding operation. Based on the results cycles of the treatments should be decided.
- **Plantation of native species:** In the weed cleared plots, regeneration of native and palatable species may take some time; hence it is suggested for artificially seeding of suitable plant species in cleared plots.

6.6. Soil Conservation:

Bank scouring by the fast flowing streams and rivulets is an issue to be addressed under this component. To prevent the soil erosion and to check the soil run-off, gully plugging, dry rubble stone masonry and crate-wire bunding should be done in the erosion prone compartments of the NP.

- Construction of crate bunds and check dams,planting of soil binding plants, in compartments 7, 8, 11, 12 etc should be taken on priority.
- Methwani, Malangan (near Khandipaji) areas are highly prone to erosion where crate bunding could be a better option to the simple check dams. Other areas where simple check dams can also work include Compartment breahtjan, soikootan, methwani, Norzudon, Jalmari and Compartment (4, 5,13, 14, etc).The details of Nallahs proposed for treatment is also mentioned in Annexure, critical sites for Markhor in and around Kazinag.

The Nallahs of Lachipora are:

1. Kopra Veran Nallah.
2. Payeen Nallah.
3. Kora Nallah.
4. Eid nar Nallah
5. Dawar Nallah.
6. Branwar Nallah.
7. Kootbela Nallah.
8. Nilsar Nallah.
9. Harveji Nallah.
10. Pandrian Nallah.
11. Reshwari Nallah.
12. Kathel Nallah.
13. Hill Nallah.
14. Goguuwala Nallah.
15. Darina Nallah.

The Nallahs of Limber are:

1. Wantan Nallah.
2. Mithwani Nallah.
3. Hokana Nallah.
4. Thoulthalan Nallah.
5. Gamaliter Nallah.
6. Nagin Nallah.
7. Sayakoten Nallah.
8. Btathgen Nallah.
9. Moree Nallah.
10. Gratnar Nallah.

The Nallahs of Naganaree are:

1. Chor Nallah
2. Pachwan Nallah
3. Gojjer Nallah
4. Chetwan Nallah
5. Hakapathri Nallah

6.7. Plantation and promoting natural regeneration

In areas like Gujjar Nalla, deodar is disappearing. The plantation of deodar in such areas would be necessary. There are sites such as Balapud, Nagrin, Tragen where regeneration occurs but the saplings are under biotic interfence thus need to be protected.
Mentioned below are the identified areas rich in regeneration;

- (Nagrin cair (Compartment 13.): Rich regeneration of deodar happens occurs in these areas which need to be protected. In Kadomwol regeneration of horse-chestnut needs to be protected.
- Dair, Bala pudand Pandren. (Compartment. 4, 5.): Healthy regeneration of deodar and horse-chestnut happens in this area, thus needs to be protected.
- The regeneration of Birch in Malangan is worth mentioning and needs protection from grazing and cutting by herders and other people.

6.7a Plantation requirements: The plantation of conifer, broad leaf and fruit trees that are growing here or in the adjacent areas may be planted at required locations.Plantation of following species should be done in the areasindicated.

- Some of the areas that have open areas of conifer hab-

itat may be planted with conifer trees. The area from gratenar and Nagrin Limber. The areas in Gujjar nalla can be taken for deodar plantation. About 10000 saplings (5000 kail+5000deodar)

- Combination of different fruit bearing plants so that fruits are available throughout different seasons need to be planted especially around the areas with good population of black bear and rhesus monkey. Walnuts, cherries,plums, viburnum and berberies are some of the options. About 10000 saplings may be sufficient for the area.
- The broad leaved species like Aesculus should be planted along, Gujjar nala,, Nagrin, Balapud. About 5000 saplings can be planted over a period of five years

6.7b Afforestation: The locations effected by locals for fuelwood extraction should have afforestation of the relevant species on priority. Although smuggling is minor. For this saplings of pine and deodar should be planted. Some of the areas include, Mouchan, Beli, Jalamari, Branward, and Hedebal. The walnut forest of Goretal should also be restored. The afforestration programms will arrest soil erosion caused due to avalanchaes and other natural factors.

6.7c De-weeding: Overgrazing results in weed infestation. Due to excessive grazing in some areas, the infestation of un-wanted grass and herb species has affected the quality of the habitat. In order to restore the quality, there is an urgent need to go for de-weeding which shall be carried out over an area of 100 ha in the present plan tenure. The areas infested include compartment 6, 7, 12, 13, 14.

6.7d. Water holes: Water holes have been proposed so as to make availability of water during lean periods. The animals some times come out of the natural boundaries to quench their thirst. The location were water holes has been proposed at those locations in the habitats which are frequently visited by wild animals.

6.7e. Salt licks: The salts licks has been proposed which is micro nutrient needed by the animals in the absence of which animal develop deficiencies which can cause certain deficiencies in the animals.

6.7f. Water harvesting structures: Are also proposed in the plan to ensure supply of water during lean periods so that animals may not venture out of the protected area.

6.8 Demarcation & fencing:

Physical demarcation of the national park was started recentlyand is under process. This activitywas undertaken in collaboration with the demarcation division of the forest department.But construction and placement of pillars has to follow. Further, zonation of core and buffer areas needs to be carried out on the basis of an assessment of animal use of these habitats. It may be important to map these zones in GIS domain so that a workable map is at the disposal of authorities for improved management.Although it is proposed in the management plan but needs further survey based on scientific research.

6.9 Control forest fire

Forest fires if not controlled in time can make heavy damages to the habitat and wild animals. It can alter habitats and cause direct mortality to animals, especially those that cannot move quickly. Fires can render habitats unusable until they recover and therefore may cause temporary displacement of species. It also can allow the weeds and fire resistant plant species grow. Thus, it is extremely important to reduce threats posed by fires and possess the ability to respond quickly to such emergencies. The conifer forests are prone to fires during the dry season and therefore extra emphasis must be given during that period.

The proposal calls for establishment of temporary fire fighting squadsand fire lines in a phased manner, first in the most fire prone parts of the park and later all across. Additionally, purchase of standard fire fighting and fire line construction equipment is recommended. Firelines should be initiated in Malangan, Gujjar and Methwani nalla on priority (3, 4, 5, 9).

Although some fire lines have been created and fire fighting equipments have been procured but do not suffice need of the staff.

6.10 Protection

Objective

To strengthen surveillance and protection measures to secure wildlife and their habitat in the National Park

Priority actions

6.10 a. Demarcation and securement

The fringes of the Park are vulnerable to encroachment especially along the village boundaries. Permanent demarcation of boundary of the protectedareas adjoining human habitation should be done by erecting Pillars to prevent any encroachment.

6.10b. Wildlife crime prevention activities

Poaching, retaliatory killing of wild animals, extraction of medicinal plants, Morchilla, timber smuggling, burning of grasslands and forests,chopping of trees like horse chestnut, mining are some of the major wildlife crimes happening in and around the KNP. Regular patrolling is the most effective tool to combat the wildlife crime. However, with the shortage of staff and poor infrastructure, patrolling should focus more in the poaching prone areas and during sensitive months. There is an option to involve primary stakeholders such as local villagers to form squads headed by the staff of NP to conduct wildlife crime prevention patrolling. The other option is to engage the seasonal/need based labours in the squad to reduce the wildlife crime. The activities are thus directed mainly at creating a workforce that is trained and equipped to undertake the task of patrolling. These people shall be provided proper training in patrolling and crime detection and shall be adequately

equipped to enable them to take up the challenges.Legal support should be provided to any case of wildlife crime where the department staff is involved. General complaint of the staff is that they are not supported after they file the case and it becomes their individual battle to fight after filing it. The DA or TA to follow the cases is not provided to the staff. To motivate the staff more into such action, insurance, health care and incentives for the staff should also be ensured. All types of logistic support including motor bikes/patrolling vehicles, maintenance of patrolling vehicles should be provided by the department. Some steps to control this menace of wildlife crime are outlined below:

6.10c Patrolling:

- **On-foot Patrolling:** The Range Officer (RO) will make a patrolling route map basedon the sensitivity of an area with regard to wildlife crime. Some of the sensitive areas include Methwani-Dragen, Thulthulan, Beli, Mohri, Shidi Charakh, Kunjnad, Neelsar. The R.O will prepare a patrolling roster to ensure that all areas are effectively patrolled and that the teams will keep on changing their routes on regular basis. The RO and forester may also accompany the patrolling teams on regular basis. In later phase of the management plan mobile application based / GPS based patrolling shall be accomplished in the NP. Each team will be comprised of one permanent staff (forest guard) and two team members either daily wagers or permanent helpers. Ideally, at least 10 patrolling parties should be deployed to cover the entire PA area effectively. The patrolling teams shall maintain monitoring and patrolling register/data sheet and submit its copy to their controlling authorities.

- **Vehicle patrolling:** Vehicle patrolling should be along the motorable areas, especially in sensitive zones of Gujjar nalla, Malangan, Manyan, Chatein Batein, Naganari, Babgail, Bodrali.
  To conduct vehicle patrolling effectively at least three motor bikes and one four-wheel vehicle should be provided at Lachipora, Limber and Pahlipora.
  The Range Officer, who will get the patrolling data from the patrolling teams on weekly basis, will send a compiled report to the Wildlife Warden on monthly basis. This will be important to facilitate timely and appropriate action.

- **Patrolling paths:** The existing patrolling paths need to be maintained for smooth movement of patrolling teams. New patrolling routes need to be created in areas prone to wildlife crime. Kadomwol to Lachidona, Nagrin to Dragen and Thulthulan; Beli to Shidi and Jalamari, Branward to Dairi and Nilsar to Nurzodon and Anadab are some of the paths to be maintained.

6.10d Anti-poaching

One of the main tasks of the wildlife department is the protection of wildlife and this they undertake by patrolling. Thus the efficiency of this activity should be enhanced. Emphasis must be therefore laid to create a workforce that is trained and equipped to undertake the task of patrolling. Periodic training programmes on monitoring and wildlife crime and enforcement therefore becomes essential and must be conducted for the benefit of the frontline staff. Regular refreshers are also suggested. Due to shortage of staff, prioritizing the patrolling in more vulnerable areas and during the sentive months.Other than the patrolling staff, some informers should be put on thepayroll so that there is a constant flow of information about poaching and other events concerning wildlife. Some of the steps to control poaching effectively are as:

- Anti-poaching camps (APC)should be established in Malangan nalla (near Branward), Gujjar nalla (Beli bahak), Methwanai nalla (Dragen), and Nagnari (Chatein-Batein). The anti-poaching camps shall be equipped with following items:

  - Logistics (sleeping bags, utensils, cooking device)
  - Solar lighting
  - Communication equipment
  - First-aid box
  - Stationary and data collection formats
  - Binoculars and camera

- The anti-poaching camps shall be regularly monitored by Wildlife Warden and Range Officer.

  - Registration of guns within 10 km of of NP should be initiated. The guns should be deposited by the poachers especially during the sensitive periods of rutting and early spring to save the rutting males and pregnant females.

6.10e. Antigrazing:

Heavy livestock presence inside the NP is one of the major threats to the herbivores, pheasants and plants and is also a cause of huge disturbance. As grazing and stay of herders in the area is the most important factor which has larger dimensions attached to, therefore has to be essentially addressed. The migratory herders and local shepherds who transverse the habitats with large livestock numbers need to be evacuated and shifted to some adjacent forest area and the buffer zones. The non-bonafide herder and non-traditional herding practices need to be stopped immediately. With the intervention of Wildlife Department and WTI, the non-bonafide herders and non-herding practices have been identified and discouraged since 2018. This activity needs to be continued for next few years to stop such practice. Anti-grazing activity needs support in terms of manpower, and logistics in addition to the backing from higher officials. KNP has manpower in terms of casual labours but they need the guidance and company of permanent staff. However, the dearth of permanent staff makes this job little difficult.

The critical markhor habitats should be freed from livestock immediatelyRehabilitation and other motivating tools can be used under this component.

Chapter 7

WILD ANIMAL HEALTH MANAGEMENT

The Wild Animal Health Care Centre (WAHCC) is essential activity for monitoring heath of the animals, presently functioning from a make shift building located within the premises of Rescue Centre Dachigam National Park. Veterinary Officer who is working under the Administrative control of Regional Wildlife Warden, Kashmir, heads the centre. The following are important activities carried out by the Wild Animal Health Care Centre:

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



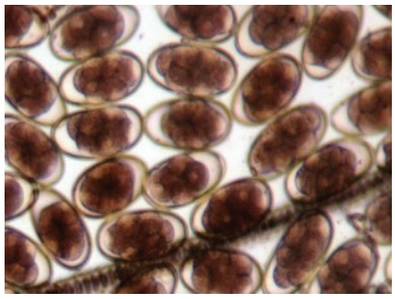
Thomas Splint in Spotted Deer

7.1. Disease investigation

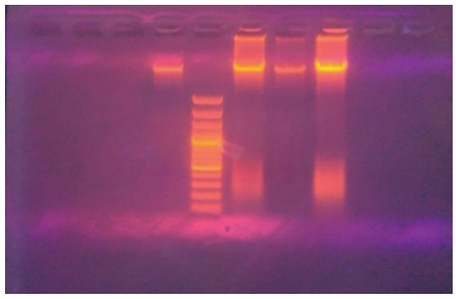
The wild animals suffer from variety of infectious, parasitic and non-infectious diseases. Diagnosis of disease is the most crucial aspect of disease investigation in wild animals and accurate diagnosis is vital to decide specific therapeutic and appropriate control measures. The samples such as blood, 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. 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)

7.2. 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.

7.3. Feeding managementof 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 Goral and black bears respectively within the National park.







7.4. Practical trainings/workshops




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

7.5 Transportation/translocation of Animals

Crating, shifting and transportation of rescued animalsis done only under thesupervision of Veterinary Officer.






Transportation of rescued Leopard

7.6. 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

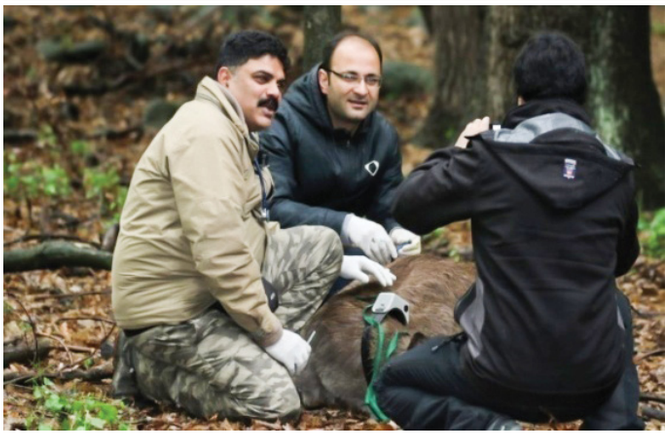
7.7. Mobile Ambulatory Dispensary

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



7.8 Other activities





Tranquilization and Satellite collaring training

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

PROPOSED STRATIGIES

The Union Territory of Jammu and Kashmir is endowed with a rich biodiversity and varied ecosystems. Kazinag National Park is home to unique and endangered animals such as Kashmir markhor, musk deer, goral, brown bear and various globally threatened pheasant species. 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, prevalence of infectious agents and endo/ecto parasites. The baseline data would be important especially while dealing with flagship species like Kashmir Markhor, because it 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.

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 commonalty 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 where these species can be exposed to domestic animal diseases resulting in severe consequences on their populations. Till date there is no published data available regarding the prevalence of various infectious and parasitic diseases among the wild animal and livestock species inhabiting in and around the national park.

As such it is proposed:

1. To undertake comprehensive surveillance of infectious pathogens in both wild and domestic animal populations of landscape.
2. To study the prevalence of various endo/ecto parasites among wild animal populations.
3. To generate baseline data of various physiological parameters of different animal species.
4. To strengthen the infrastructure and capacity building of the frontline staff with regard to collection and preservation of samples.
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 and information regarding occurrence of various diseases among livestock in the buffer regions of National park.
7. It is also proposed to establish a rescue centre cum field station for treatment of rescued animals and for carrying out basic laboratory procedures including preservation of various samples.
8. To develop close coordination with animal husbandry department for postmortem in case of natural deaths.

Chapter 8

ECO-DEVELOPMENT

Local communities are an integral part of the entire Himalayan landscape. Hence, conservation initiatives must be oriented in such a way which can demonstrate benefits to the locals without depleting the natural resources available. The modern trend of wildlife conservation has thus started to involve local communities; especially if they have a stake in the area that is protected. The purpose of eco-development activities is to develop the peripheral areas along eco-sensitive lines so that people living around a protected area do not pose much threat to the resources found within. Such initiatives also provide the locals some incentives to conserve an area and to the wildlife department to build better relationships with the locals.

The local population living in the fringes of KNP is dependent on the fire wood, fodder and other NTFP from the NPcausing disturbance and habitat degradation. Thus initiatives taken to ameliorate this threat may be to reduce the consumption of fire wood by providing suitable alternatives like LPG connections or fuel efficient chullahs and other devices that lower the consumption of fuel (like pressure cookers). A part of that goal can be achieved by providing them solar lights for their daily use.These initiatives can effectively reduce the pressure of firewood extraction in the long-run.

Implementing schemes on the lines of Jan Van Vikas in Maharashtra can have a positive impact on ground. Development of the local community must also involve initiatives that help them to better their way of living. To ensure the community participation, a two-way approach is advocated here— development of fringe areas along eco-sensitive lines, promotion of NRLM and other livelihood in the landscape so that locals see a value in protection to animals and habitats. This plan also includes necessary activities for the betterment of their present living standards, which can ensure less dependence on the forest for the requirements of energy sources.

The microplan prepared for landscape can guide and may be consulted to have relevant interventions on ground.

8.1 Objective

To promote eco-development activities in fringe areas for reducing the dependenceof people on natural resource of KNP and generating support for conservation

Priority actions

8.2 Establishment of Eco-development Committees(EDCs):

EDCs shall be constituted in the villages within 5 km from the NPboundary to ensure better participation of the communities in the conservation programme. These eco-development committees not only will help to check the pressure on the forests but also will help the department to co-ordinate better during crisis situations by providing vital information. Forester of the respective area would be the ex-officio Member Secretary of the EDC. Participation of various ethnic and social groups including women should be the member of the EDC. The committee will act as a bridge between the Parkmanagement and fringe communities, besides providing institutional support to implement the eco-development activities. The eco-development activities carried out under this plan may be taken up as those complementary to the schemes already carried out

in the area by the Rural Welfare Department and other government development schemes. Local administration, *Panchayat*, Public Health dept., Animal husbandry dept. and other dept. should actively partake for welfare of local communities. Implementation of public welfare schemes like Sampooran Gramin Rozgar Yojana (SGRY), National Rural Employment Guarantee Act (NREGA), Indra Awas Yojana (IAY), Rural Housing Scheme (RHS), Swaranjayanti Gram Swarrojgar Yojana (SGSY), Pradan Mantri Gram Sadak Yojana (PMGSY), Model Villages (Prime Minister Reconstruction Programme), Integrated Watershed Development Program (IWDP - Haryali) and literacy programmes should be insured by administrative department also.The matter taken up with District administration.

8.3 Implementation of micro-plan prescriptions:

The measures prescribed in the micro-plans shall be implemented during five years of the management plan period. Eco-development activities shall form an important component of the Annual Plan of Operation (APO) submitted to the government for funding. Moreover, the Parkmanagement shall also mobilize resources from line department for implementation of relevant prescriptions. Regular monitoring of implementation and impact of initiatives on attitude of locals and their dependence along with the improvement in ecological condition of the NPshall be done.

8.4 Reduction on Fire Wood Extraction:

Extraction of firewood is a major cause of habitat degradation in the entire Himalaya as well as the Himalayan foothills. Firewood is extracted and used to serve two main purposes – use for cooking and for space heating, especially during winters. There are about 10 villages with about 10000 populationwhich experience cold climates for over five months and as a result, there is greater need to consume more firewood. These villages near forests at higher altitudes do use fire wood for space heating through 'bukharee'. However, more fire wood is required in winters for heating water and cooking.

Initiatives to reduce this problem should involve the provision of alternate sources of energy like LPG connections for the local communities or provision of fire efficient smokeless chullahs and also to assist the people below poverty line by providing better, less energy consumptive cooking utensils such as pressure cookers, rice cookers, room heaters. These initiatives can effectively reduce the pressure of firewood consumption in the long-run. However lower consumption of fuel wood does not necessarily translate into reducing extraction and measures that encourage reduced extraction must be encouraged to create the desired impact. WTI has been able to link the locals with UJJAWALA scheme and there have been about 200 beneficiaries. This needs to be extended and the impact on fuel wood extraction to be assessed. In the past some families living on the fringes of villages Lachipora and Limber living below poverty line were provided Gas chulas .The programmes and activities to improve sanitation in villages like lachipora,Babagail etc.shall be taken up in phased manners so as to lure support of people for conservation,protection of the protected areas.

8.5. Livestock Vaccination:

To ensure no spread of epidemic in the wild population of ungulates and galliformes, vaccination of the livestock is required. Diseased livestock should not be allowed inside the Park. Livestock vaccination tours shall be conducted around the adjoining villages so that the risks of transfer of disease to the wildlife are minimized. Collaborating with the relevant departments such as Animal husbandry/ sheep department would be required to easily meet this objective. Further, a livestock vaccination post shall be established each year for the vaccination of the nomadic herds that enter the valley from outside. The programme shall be executed with Animal husbandry and target livestock shall be for bonified residents

Technical/Financial support to set up small scale enterprises

Technical support through vocational trainings should be given to the potential and skilled local people (from fringe villages) and local shepherds. Financial support may be provided to skilled locals for encouraging them to set up locally, small scale units to provide improved livelihood opportunities. The kind of entrepreneurship shall be determined through micro-plan and appropriate training shall be provided for each.

8.6 conflict reduction:

Crop damage by the wild animals is a major issue for the negative attitudeof the community towards wildlife and it may provoke some extent of retaliatory killing or fatal injuries to the wild animals. These can be averted if the department ensures proper training of the local villagers on how to prevent crop damage by wild animals and also follows an effective system of providing incentives to the individuals who efficiently prevent the crop damage by wild animals by implementing the strategies as mentioned by the department or as trained by the experts.

Chapter 9

ECO-TOURISM

Ecotourism is defined as 'responsible travel to natural areas that conserves theenvironment and improves the well-being of local people' (by the International Ecotourism Society). Such tourism is lowimpact,educational, and conserves the environment while directly benefiting theeconomic development of local communities. Most wilderness areas across India are fragile ecosystems that provide a whole hostof ecosystem services to local residents and people living downstream; and continueto remain important tourist attractions. However, unplanned tourism in suchlandscapes can destroy the very environment that attracts such tourism in the firstplace.

Kazinag landscape has a great potential for eco-tourism and this potential if tapped sustainably and in an eco-friendly manner, shall benefit both people and wildlife.

Objective

To encourage sustainable eco-tourism in identified areas

Priority actions

9.1. Ecotourism zone:

The Kazinag landscape is a fragile system with rich and there is a need to move towards a model of tourism that is compatible with this fragile landscape. To promote eco-tourism in this landscape, the first step should be the identification of potential tourism zones around and inside the National Park followed by the development of an apt eco-tourism plan. The eco-tourism plan will help to establish and implement rules and regulations which on one hand will ensure the protection of wild animals and their habitats and on the other hand will help the tourists/hikers to get the optimum/best possible experience of Himalayan wildlife. Kazinag landscape has a great potential to become a hot-spot of Himalayan eco-tourism especially for the sighting of Himalayan wildlife especially large mammals and galliformes, which can be rarely seen elsewhere. Identification of such "vantage points" is necessary to chalk-out a detailed tourism plan including description of trails, campsites, requirements of days and manpower to carry out trekking in different routes and such other details. The monetary benefit from the eco-tourism will be shared by the department and the local communities; hence, proper training of the selected individuals from the community as tour guides is essential. At the same time, to ensure participation, the concept and implementation plan of the eco-tourism in this area should be explained to the communities and can also be discussed in a meeting.

9.2. Eco-tourism plan:

To promote eco-tourism in this landscape, the first step should be the identification of potential tourism zones around and inside the National Park followed by the development of an apt eco-tourism plan. The eco-tourism plan will help to establish and implement rules and regulations which on one hand will ensure the protection of wild animals and their habitats and on the other hand will help the tourists/hikers to get the optimum/best possible experience of Himalayan wildlife. The eco-tourism guidelines issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC) shall be kept central to eco-tourism activities in the sanctuary. While preparing the eco-tourism plan following points shall for an integral part of the activity.

- Ensure no or low-impact tourism that protects ecological integrity of wilderness areas
- Highlight the heritage value of wilderness and the Protected Area
- Build environmental and cultural awareness and respect
- Facilitate the sustainability of ecotourism enterprises and activities
- Provide livelihood opportunities to local communities and bonafide herders
- Use indigenous, locally produced and ecologically sustainable materials for ecotourism activities
- Surveillance and awareness of visitors inside the sanctuary will help in accidental / unintentional forest fire.

Involving locals in eco-tourism activities:

Following measures shall be taken to develop scopes for direct and indirect benefit to dependent communities:

- The youth from local community can be an important resource to work as guides, tour operators and helpers. To enhance their capacity necessary trainings must be given by the sanctuary management and tourism departments
- The eco-tourism society is in final stage and local youth have been involved in its constitution.
- The Park management shall promote the eco-tourism activities in the area by appropriate strategy to help the community-based eco-tourism initiatives. For the promotion of eco-tourism in Kazinag landscape, attractive hoardings, banners, collaterals, pamphlets and other such publicity materials should be prepared and distributed. To publicize this eco-tourism initiative, taking help of the media and internet is also another option.
- The Wildlife Protection Department/Park management shall facilitate establishing homestays on pilot basis in strategic areas.

9.3 Eco-tourism society:

To ensure participation, the concept and implementation plan of the eco-tourism in this area should be explained to the communities and can also be discussed in a meeting. Formation of eco-tourism society involving the local people is required for the proper management of the process and this can also be facilitated by the department. To promote the idea of eco-tourism in the area, the awareness of the people is an absolute necessity and thus there is a need for well equipped awareness centre in the Limber area to show the tourists as well as the local people about the specific beneficiary outcomes of eco-tourism and to also make them aware about the do's and don'ts of this process.

For the promotion of eco-tourism in Kazinag landscape, attractive hoardings, banners, collaterals, pamphlets and other such publicity materials should be prepared and distributed. To publicize this eco-tourism initiative, taking help of the media and internet is also another option.

Under this activity tourism plan shall be prepared in consultation with Tourism Department and the areas where tourism activities are allowed shall be identified by the department. Under this activity home stays, errection of hoardings,publicity material, capacity building programmes,Constitution of the eco society have also been proposed. The theme of the plan is to explore eco-tourism, generate employment.

Chapter 10

INFRASTRUCTURE DEVELOPMENT

Natural attributes of a site are maintained and enhanced by staff whoare charged with the responsibility of protecting and monitoring a protected area. However, the staff can succeed in their mission only if they are motivated, trained and has the necessary equipment. Therefore, this plan lays emphasis on developing and enhancing the necessary capacity of the frontline wildlife staff and to provide them with the necessary equipment to support their field activities and office work. It is also important to provide the staff with the basic amenities like living quarters in the field so that the staff can be posted to these areas, patrolling camps that can withstand the harsh weather so that patrolling parties can make use of these night shelters for extended periods of time.

Fast and efficient communication is a pre-requisite to good management. Reduction of response time to wildlife emergencies can be achieved if this problem of communication can be solved. Communications can either be logistics or tele-communication and these can be addressed by ensuring the provision of proper and effective infrastructures such as vehicles and telecommunication facilities. The terrain and weather conditions of the National Park may not permit use of cutting-edge technologies used elsewhere in the plains, however, basic facilities such as vehicles for rapid movements, motorbikes for the mountain trails and mobile phones can be provided. Procurement and proper use of these necessary equipments should be followed by a proper maintenance scheme as well as replacement scheme whenever required. Required activities to strengthen the communication among staff and to facilitate and mobilize the proposed conservation actions are tabulated below (Table 5.6):

Following development works are proposed.

10.1 Objective

To develop and maintain infrastructure for improved management, protection and communication

Priority actions

10.2 Infrastructure development

Construction of residential quarters for the front line staff has been proposed which is extremely necessary for round the clock presence of the officials to control poaching, NTFP collection and livestock grazing and to address Man animal conflict.Therefore there is need to provide four staff quarters at the locations ofNagin, Pahen,Tawrian and Mayan. The plan also calls for construction of snow resistant patrolling camps in the upper ridges of the park for most poaching occurs in the snow season. Besides, maintenance and construction of bridges is also proposed at specific locations.

Additionally, development of infrastructure necessary for undertaking effective patrolling is proposed. These include watchtowers, shelter sheds and check posts at strategic locations.

The plan also provides for upgradation of survey equipment's used by the frontline staff and includes procurement of devices like camera traps, binoculars, compasses, GPS and others. Availability of the right equipment along with training on their use greatly improves the capability of undertaking good quality work. Further to cover any loss, introduction of insurance schemes for the staff and provision of proper health care facility to the staff are also part of this plan.

The plan also seeks to upgrade the camping gear of the field staff and procure basic office equipments like computers, printers and photocopiers. It is obvious that protection measures, on which depends the maintenance of animal populations within a park, can only be successful if such amenities are provided.

Following infrastructure shall be developed and maintained during the management plan period to strengthen protection and management of the Park.

Infrastructure development / maintenance	Location
Buildings	
Construction of staff quarters	Nagin, Pahen Mayan, Tawrian, Gabwar BImyar Compt 09 Lachipora, Babgail
Maintenance of staff quarter	Koot bela, Babagail, Naganaree
Watch towers	Charakh, Thaal, Dag-wan, Gabawar, babagail, Compt 09 Lachipora, etc.
Shelter sheds	Malangan,Mohri,Lachi-pora Methwani,Gabawar, Babagail,
Anti-poaching camps	Beli bahak, Nilsar, Methwani
Tourism Gate and Check-Post	Nagin, Koot, Brethathri
Nature Interpretation Centre with Tourist Information Centre	Babagail, Lachipora

Existing Infrastructure

Infrastructure	No.
Limber Wildlife Sanctuary	
Tawarian Quarter for accommidation	01
Watch Tower	03
On Room Quarter at babagail	01
Shelter sheds	04
One Room Shelter Shed at Bimyar	01
Lachipora Wildlife Sanctuary	
Staff Quarter at Bijhama	01
Shelter shed at Nilsar	01
Watchtower at Co. 06	01
One Room Quarter at Koootbela	01
Naganaree Conservation Reserve	
Staff Quarter at Kakapathree	01
Shelter Shed at Khacherdari	01

10.3 Communication and equipment

The field staff communicate through their mobile phones presently and in some many locations like Babagail, mobile phones don't work and the WLL phones is an option. Once the situation improves, it is sought to be upgraded to wireless with patrolling staff being provided a hand held device and one mounted in the patrolling vehicle. Communications are also important in the area since a designated portion is being promoted as an eco-tourism area.

Mobility is as important as communication one vehicle and four motorcycles are proposed to help staff have better and quicker access to areas in mountainous terrain.

Communication and mobility	
Wireless Network	One control room at Baramulla, Two repeater stations and hand-held devices.
Motorbike	Four
Four-wheeler patrolling vehicle	Two
Mobile phones	20
Research and Camping equipment	
Binoculars	10 pairs
Camera traps	50 pairs
GPS receiver	30 units
Tents	20
Sleeping bags	50
Shoes	40
Jackets	60
Rain coats	60

10.4. To Protect and restore the medicinal and endemic plants unique to KNP.

The Kazinag NP is rich in plants and about 50 medicinal plants have been documented (Ahmad 2014). Species like *Sausurrea costus*.,*Podophyllum* sp., *Trillium*, *Aconitum*, *Jurinia*, *Inula* sp., etc. have been extracted commercially before even from within the NP prior to the notification for WLS. Thus, there is need to conserve and propagate this natural wealth.

Objective

To restore important medicinal plant assemblage in suitable areas of the Park

Priority actions

a. Facilitate natural regeneration

- Mohri, Malangan, Keekar gali, Loren, Lucy, Burzapathri, Kothenalle, Burzakote, are some of the best sites for natural regeneration of medicinal plants. Other sites suitable for natural regeneration of medicinal plants shall be identified and prioritized after a systematic survey.
- Local shepherds and migratory herders shall be taken into confidence to release important sites from livestock and other anthropogenic pressure to allow natural regeneration of rare medicinal plants with high trade demand.
- Stop the extraction of medicinal plants through stringent enforcement of Wildlife Act

b. Assisted regeneration

- Identification of sites for plantation of important medicinal plant species which are threatened due to over-extraction
- Establishing temporary medicinal plant nursery
- Plantation and post-plantation care as per the operational schedule.
- The action proposed to be taken in collaboration with forest department.

Chapter 11

RESEARCH AND MONITORING

The Kashmir part of Himalayas has been explored to a less extent for wildlife research and conservation with some surveys mainly focusing on hangul (Schaller 1969, Holloway 1971, Kurt 1978), until recently when some species ecology studies were conducted (Ahmad et al. 2010, Charoo et al. 2010) in Dachigam. However Kazinag remained mostly unexplored except a few preliminary surveys (Kaul 1989). Only recently, more detailed studies were conducted which mainly focused on the ungulate assemblage (Bhatnagar et al. 2009; Ahmad 2014; Ahmad et al. 2017; Dar et.al. 2021) in Kazinag landscape. More intensive studies and applied research needs to be undertaken to have scientific management and proper conservation planning for threatened species and degraded habitats.

Ideal way of conducting research is outsourcing it to the relevant institutions/university, organizations in a project mode, clearly identifying and laying down the deliverables and monitoring to make sure that they are achieved. For wildlife population and habitat monitoring exercises, it is desirable that the capacity of the frontline field staff be improved so that they may be able to undertake such activities under the guidance. For that purpose, all necessary field equipment and gear must be provided.

The researchers and park managers live in a symbiotic relationship. Without managementinitiated action, the researchers' endeavours are sterile and good decision making must be based on good science. Without good service generated by researchers, managers will only by the best of good fortune, make the right decisions. Every successful partnership reflects a high level of trust and a joint sense of commitment. Researchers are often specialists, not generalists. This is often a barricade to communication. It should thus be seen as a joint effort on both sides so sense of respect and mutualism should be followed by managers and researchers too (Harmon 1994).

The two non-governmental organisations, Wildlife Trust of India (WTI) and Nature Conservation Foundation (NCF) are playing a crucial role with the help of the Dept. of Wildlife Protection (J&K) and with the Indian Army for conservation of the markhor since 2004; therefore such participatory efforts are required more as this area is related to issues like insurgency and security.

Necessary survey equipments and field gears along with photo-documentation equipments should be procured. Researchers should be supported to conduct the research.

11.1 Objective

To conduct research for management and conservation of key habitats and threatened species

Priority actions

The NP management shall undertake applied and basic research that could help in scientific management of the sanctuary. The sanctuary management can collaborate with universities and conservation organizations to undertake such works in project mode. Further, it is important to build the capacity of frontline field staff to conduct regular monitoring of habitat and wildlife populations. The staff shall be provided with adequate equipment support.

Following research topics are suggested to be accomplished in the management plan period.

11.2 Monitoring of threatened species/Census:

- Kazinag has rich assemblage of flora and fauna including threatened and endemic species such as markhor,

musk deer, western tragopan Updated information on the status of key species is vital for their management. Occupancy and abundance of these species within the NP need to be determined periodically so that the managers are updated on their status and distribution which helps a manager to gauge the response of animal populations to the management interventions. It is time to build on the information to strengthen the management and conservation of the rich wildlife of Kazinag NP. It is also important for the manager to know which areas are frequented by key species so that adequate care of those areas is taken.

- The population trend of a species gives an idea about the health and issues of the species which may also infer the success/failure of management interventions. Therefore monitoring of endangered species becomes crucial towards conservation planning. The monitoring of important species such as markhor, brown bear, black bear, musk deer, common leopard, western tragopan and cheer would help to understand the effectiveness and relevance of management interventions.
- Thus, management input should reflect the effects on status of these species. To monitor the effects, it is highly desired to monitor these species on regular intervals. Annual surveys shall be systematically done to achieve the objective. Periodically however, techniques for assessing occupancy of species at a landscape level may be carried out. Such assessments would help the manager to understand the occupancy of areas by the target species. Help of organizations and universities may be sought to help the staff of the wildlife department.

11.3 Study on the impact of livestock grazing pressure on mountain ungulates and alpine habitats

- Livestock grazing and associated disturbance seems to be one of the major threats to wild herbivore population and the alpine pastures. However, there is inadequate understanding on the impact of livestock grazing on mountain ungulates such as markhor and musk deer. WTI and WLP have found that overgrazing reduces the standing biomass of herbs/grasses to a large extent. Detailed studies on interference and exploitative competition will provide insights due to huge livestock numbers and accompanied dogs and herders.
- Research on some aspects of species ecology like impact of grazing on markhor and associated species, collection of medicinal plants and herbs on pheasant populations etc. are also recommended. It is also important to prepare inventories of the main taxon groups found in the Sanctuary so that distribution maps may be generated for important species for their management. During these basic studies, it was found that Kazinag is very rich in wildlife and there is a good scope for research and conservation. More detailed studies on impact of livestock grazing on wild ungulates particularly markhor would be required to implement appropriate management practices to conserve the endangered species. We still don't know the home-range of the flagship species markhor, making it difficult to know its seasonal ranges and appropriate size of a PA or landscape to be designated for its conservation.

11.4 Update information on the major threats

- Identifying the specific threats to different species would help to address them in time. Quantification of the existing major threats and identification of potential threats should be taken up. It will lead to prescriptions for management interventions to address the identified threats. For the assessments of threats towards survival of musk deer, brown bear, wolf and vultures, detailed studies on their food and space requirements need to be carried out. The prevalent threats need to be assessed and the prescriptions to be laid down.

11.5 Mapping resource use

- Documentation and quantification of the sanctuary resource used by the fringe communities and other users for sustenance and commercial purposes shall be done on priority basis. This resource use mapping will help the managers in taking appropriate measures. Like most of the PAs in India, Kazinag is also surrounded by people who may use resources from the park. It will be useful for the management of the Sanctuary to assess the socio-economics of these people and map their resource use. Provision for engaging of JRF have been kept in the budget.

Chapter 12

EXTENSION AND AWARENESS

The ignorance and lack of awareness about the importance of wildlife can sometimes be the cause fordeterioration of wildlife. To ensure the participation of local communities and the other stakeholders in the conservation planning of the Kazinag landscape, awareness generation among them is a pre-requisite. Apart from the local communities, other stakeholders using the Kazinag landscape include migrant herders and army personnel. A general awareness meet involving all these stakeholders together should be conducted and the proponents of conservation of Kazinag landscape can be presented to them. Similar awareness activities can be carried out in a small scale approach involving all the school children.

To promote the eco-tourism activity and to promote the conservation programme, awareness of the media personnel is necessary and such meeting involving the media will also be conducted. In addition, to promote all these activities, preparation and installation of signage and hoardings at strategic places should be carried out. Awareness in the public administration level can also be achieved by conducting meetings with the district administration and to make them aware about the initiatives. Similar campaign is necessary for the Army personnel as they use this border area frequently. Along with the conservation initiatives taken for the Kazinag landscape, parallel awareness generation programmes describing the mitigation measures of human animal conflict in the region can also be taken up by the department.

12.1 Objective

To spread awareness about conservation values of the KNP

Priority actions

a. Develop and maintain a dedicated website for the Park

- The website would be an appropriate step to highlight the NP and its biodiversity. The information acquired through research and other activities would be uploaded on the website on regular basis.
- It would be also easy for the interested tourists and other target groups to get relevant information on the website and plan their trips/treks and studies accordingly.

12.1 Print publicity material and install hoardings and signage

- For improving awareness level about the socio-cultural and ecological importance of the area in this landscape, attractive hoardings, banners, collaterals, pamphlets and other such publicity materials shall be prepared and publicized suitably.
- The initiatives shall be publicised through digital media. Short documentary films on the ecological and socio-cultural importance of KNP will also help creating awareness.
- Hoardings need to be erected along the Srinagar Muzaffarabad(POK) highway

12.3 Observing Foundation Day

- The NP has been notified on .. 2007, hence this date can be observed as 'Foundation Day' of KNP. Awareness events shall be organized to mark the day and involve various stakeholders in the conservation of the sanctuary.

12.4 Conducting guided tour for local schools students

- Regular guided tour of local school students shall be organized to generate interest on wildlife and conservation of KNP.

12.5 Conduct awareness workshops in the local educational institutions

- Conduct workshops in the local colleges about the importance of wildlife and landscapes like KNP
- Conduct awareness programmes in the local educational institutions
-

12.6 Conduct awareness workshops for stake holders and policy makers

- In Kazinag army is an important stakeholder and their awareness about wildlife is important
- Other stakeholders include herders, locals who are to be made aware
- Atleast local policy makers and administrators such as local MLA, DC, SP, SHO, Sarpanch need awareness to get support

12.7 Equipping the 'Nature Interpretation Centre'

- This is important to make the stakeholders and visitors to explore the ecological and socio-cultural treasure trove of the area. The Nature Interpretation Centre at Limber and Lachipora should be equipped with a projector, nature movies and material/videos regarding the biodiversity and other characteristics of the Park to cater to such visitors and make them aware about the values of the NP.

Chapter 13

MAN-WILD ANIMAL CONFLICT

The interface between wild animals and humans sometimes leads to a negative interaction, for the animal or the human and ends into loss to either or both. Conflict also happens when there is loss to property, crops or livestock by the wild animals. In the last decade or so, there has been an unprecedented rise in instances of attacks of wild animals on humans causing death or injury. Thishas emerged as one of the main conservation issues afflicting the society because it causes widespread antipathy towards wildlife. Human injury or death due to wild animals, especially within the boundaries of human landscapes,is not desirable and such incidents attract large scale condemnation. Thus, there is need for the Department of Wildlife Protection, J&K to be pro-active on this issue. It is understood that unless this problem is mitigated, wildlife and its managers may be seen as 'villains' of the society. Therefore the plan lays emphasis on training staff and a specially created rescue squad in the nuances of dealing with conflict. However, the conflict around Kazinag NP is mainly due to crop and property damage by wild animals, which is a serious concern for the poor fringe communities. Till now there has been no intervention from the Department to reduce such incidents or compensate the losses, making the local community think negative about the wildlife conservation. The crop damage by black bears, monkeys and langurs is a serious issue in the fringe villages of Kazinag. Monkeys have further started damaging the roof of the houses. Provisions for compensation of the crop loss should be kept in the plan to win the support of locals for the conservation.

The human loss/injury is compensated as per the standing provisions of the Government of J&K.However there is no provision for compensation of crop/live stock damage which needs to be brought under the provosions of compensation.The proposal provides to link the communities with schemes like Jan Van Vikas Yojna in Maharashtra and lobby to get make the losses through conflict as natural disaster. It is important to generate awareness amongst the masses so that the negativity about wildlife amongst general public is negated which also includes a role for the community in the management of conflict. Such initiatives are necessary forengaging the community in issues of wildlife management.

13.1 Objective

To act proactively to reduce losses due to human-wildlife conflict around the KNP

The conflict in and around KNP is mainly due to crop damage by black bear, Rhesus monkey and Himalayan langur. Recently rhesus has started damaging house roofs. This has resulted in economic losses to locals and the retaliatory killings of wild animals.

Priority actions

Following are the priority action to deal with the problem.
Identification and mapping of conflict prone areas

13.2 Analysing the human-wildlife conflict scenario:

Mapping of conflict prone areas shall be done by collating the data of human-wildlife conflict over the last five years (a minimum, 10 years being ideal). The department has data of human injuries/loss and species involved in the conflict needs to be analysed on scientific basis and measures shall be proposed to reduce the conflict.The data shall be analysed to identify conflict hot spots.

13.3 Conflict mitigation activities:

Preventive measures

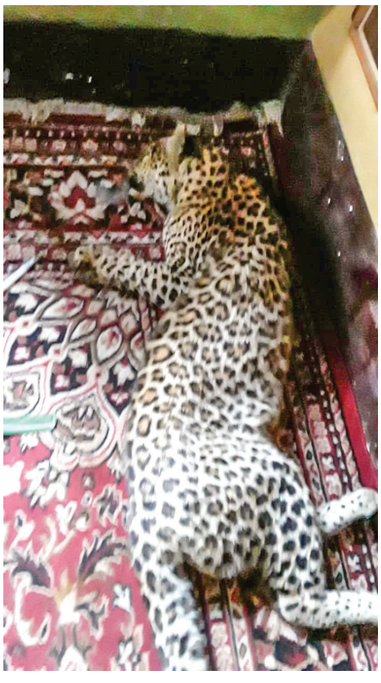
- Sensitization of people in high and medium conflict areas*:* The PA management in partnership with other organizations shallorganize awareness camps to make the villagers, and other stakeholders aware about causes of conflict and preventive measures.
- Methods to protect crops and fruits:Whereas the old methods are being followed to protect crops, it has failed to stop the monkeys from destroying crops. New relevant methods used in different parts of India and world need to be tried here to reduce the conflict. The methods followed are as:
    - Bursting of firecrackers.
    - Erection of the traditional dongas inside the crop/ maize fields where people stay and Create noise from the utensils which are strategically tied to a rope .
    - As barrier some families also cover their fields with wooden logs as a traditional practice to restrict the entry of Black bear into their maize fields.
- Whereas, it is difficult to reduce such interactions, the negative impacts of such events can be reduced by good and timely management of the problem. While the NP is home to the wild animals and their habitat needs to be secured from overgrazing, fragmentation and high anthropogenic disturbance to reduce the conflict.

Reactive measures

- Put in place a conflict management team: Quick response by trained manpower is the key to reducing damage in conflict scenarios. It is important that few staff of the PA be trained to deal with situations until the team from control room reaches the conflict site. It is highly desirable to equip and train the Rapid Response Team at Control Room, Sopore. Procurement and maintenance of rescue vehicle along with the assured availability of equipment necessary to capture for problematic animals and/or rescue an animal shall help the smooth conducting of the human-wildlife conflict mitigation process in this area.Theequipment Trapping cags,Tranqulizing Guns,Nets,Medicines/dots and communication facilities like Rescue Van and Motor bikes are proposed in the plan to keep. Management activities at proper end.

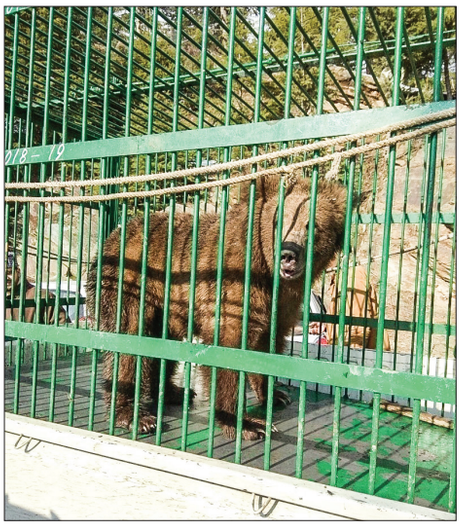
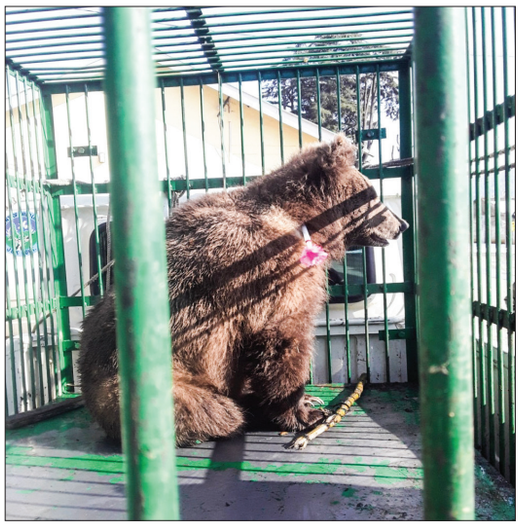
Ex-gratia/relief

- There is a provision of funds to make *ex-gratia* payments to affected families in case of human loss under conflict situations. Therefore, timely relief in cash could work to assuage any ill feelings towards both the department and the wild animals (as wild animals are seen as departmental property. However, such *ex-gratia* for the damage of standing crops, fruits and property by wild animals is not in place yet. The PA management would apprise the state level functionaries for including these losses under the *ex-gratia* coverage. There is no provision for compensation for livestock damage by wild animals.
  An insurance scheme covering the loss of crops due to wild animal may help to reduce the losses suffered by the locals and thus also reduce the frequency of retaliatory killings or other such untoward incidents. Lobbying for putting the crop damage under Natural Disaster would be very useful. Linking locals with the **Fasal Beema Yojna** would be a big step towards compensating the losses and gaining local support for conservation.





Leopard Tranquilized in side Residencial House


Trapping of Problematic Brown & Black Bear in Human Habitations





Leopard Tranqulized in side Residencial House at Baramulla





Capacity Building Programme on Handling of Man Animal Conflict/Wildlife management Techniques

Chapter 14

ADMINISTRATIVE SET-UP AND HUMAN RESOURCES

The area is deficient in staff having not required number of minimum staff required for protection, conservation and Management interventions .The Park shall be divided into three management units or blocks viz; Manyan, Lachipora, and Babagail, each headed by a Forester rank staff. The headquarters of these units shall be at Manyan, Lachipora, Babagail. Manyan should be divided into one beat, Lachipora into two beats (Malangan and Gujjar). Babagail into two beats (Gamalitter, Methwani), each headed by a Forest Guard. Two watchers / helpers will assist each Forest Guard.

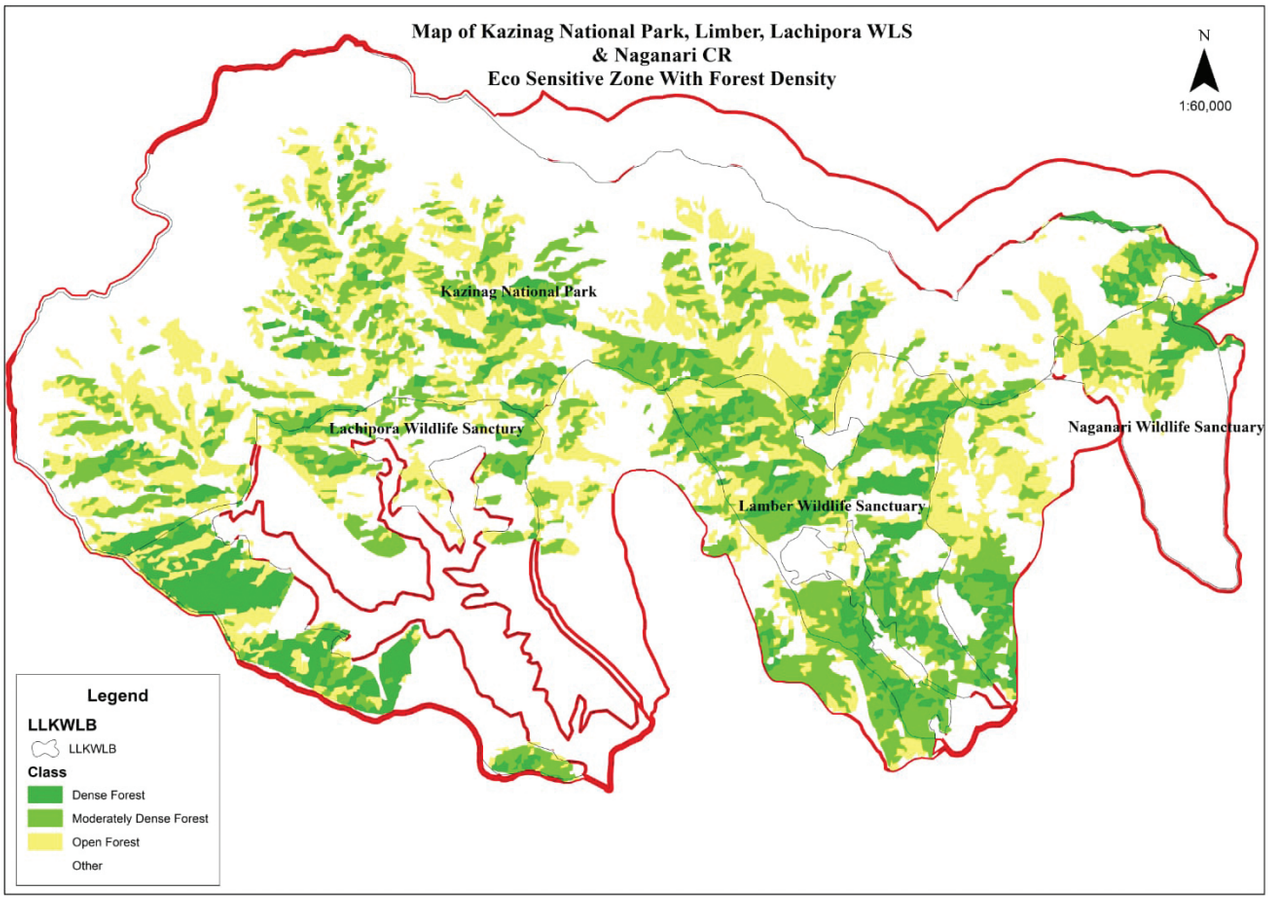
Assistant Research Officer has been proposed for studying of management interventions outcome.There is also dearth of Ministerial staff in Range Office,hence staff (Computer Operators/ Junior Assistant) has been proposed for maintaing of office records to be computerized.

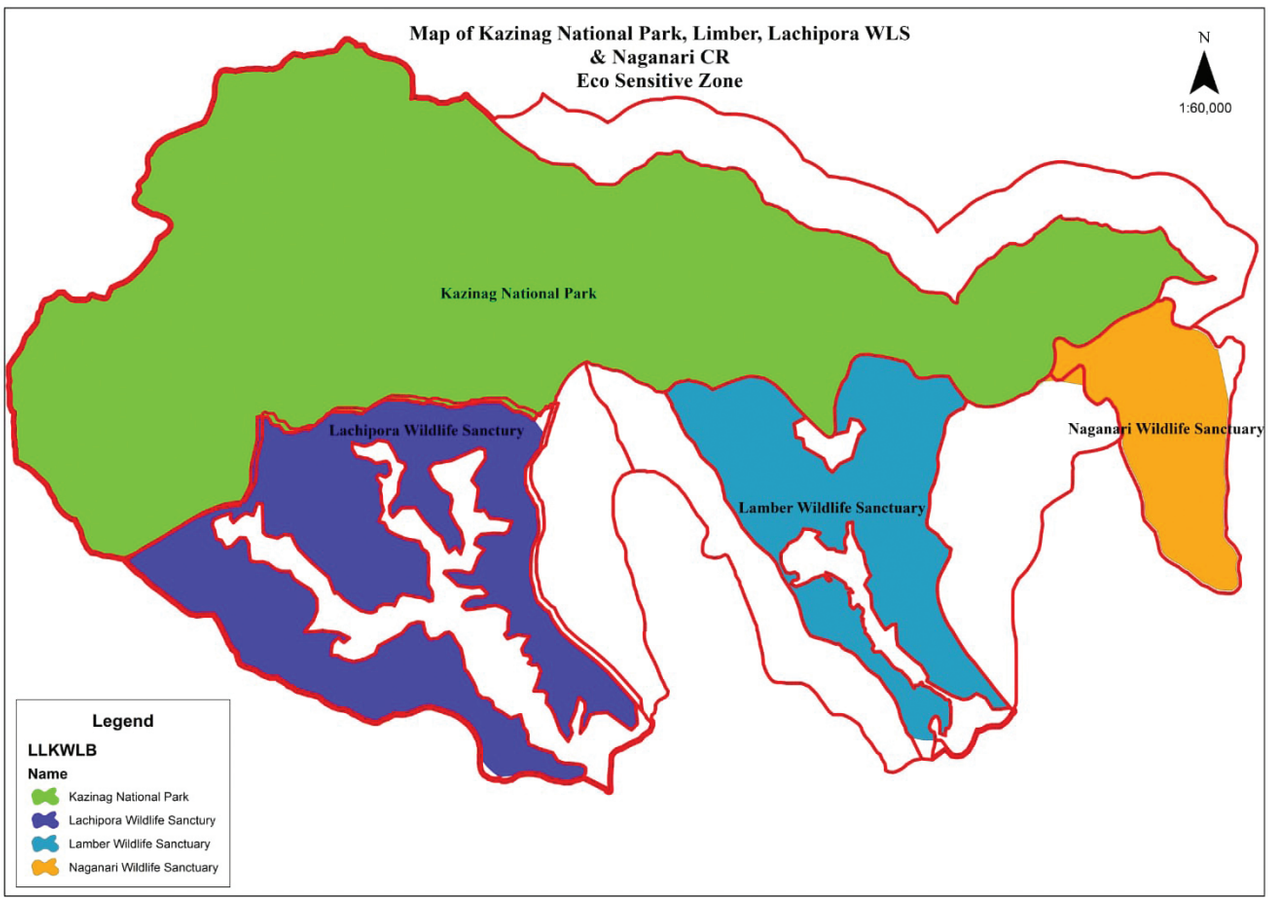
Additionally, casual and seasonal labours shall be deployed in sufficient numbers to assist the permanent staff. Technical staff like Vetenary Surgeon and Vetenary Attendent has been proposed for smooth functioning of the PA management. One Range Officer shall be dedicated only to the park and onother shall be for looking after man-animal conflict out side protected area network.. The proposed strength of staff in Park is given below;

Rank	Present strength	Proposed strength
Wildlife Warden	1	0
Range Officer	1	1
Vetinary Surgeon	0	1
Forester	0	4
Forest Guard	6	14
Computer Operator	0	01
Watchers/Helper	3	16
Driver	0	2
Range Clerk/Jr. Asstt	0	1
Vet. Attendent	0	02
Orderly	0	3
Total	11	45

Eco Sensitive Zone

Area of PA: **226.25 sq.km**
Proposed ESZN Area: **69.97 Km**
Proposed Extent: **0 to 5 km**





(Zero extent of the Eco-sensitive Zone towards West and North-West direction is due to presence of actual Line of Control and also due to human settlements)

Chapter 15

BUDGET

S. No	Activity	Budget for 10 Year Plan Tenure (Amount in INR Lacs)											
		1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year	Grand Total	% of Grand Total
01	Habitat Management	62.47	61.47	66.74	66.74	71.74	57.74	58.74	66.74	66.74	66.74.	646.40	28.58%
02	Protection	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	250.00	11.04%
03	Wildlife Crime preservation	12.87	10.97	11.27	13.37	11.67	12.87	10.97	11.27	13.37	11.67	120.30	5.31%
04	Restoration of Wild Medicinal Plants	3.00	2.00	3.20	3.50	3.80	3.00	2.00	3.20	3.50	3.80	31.00	1.37%
05	Management of Human Wildlife	62.20	47.60	33.70	54.10	24.50	41.20	30.10	16.20	36.60	34.50	380.70	16.82%
06	Eco-Development	5.00	17.00	13.00	15.00	15.00	5.00	17.00	13.00	15.00	15.00	130.00	5.74%
07	Eco-Tourism	5.50	3.50	3.50	3.50	3.50	5.50	3.50	3.50	3.50	3.50	39.00	1.72%
08	Research and Monitoring	8.00	8.50	9.00	9.50	10.00	8.00	8.50	9.00	9.50	10.00	90.00	3.97%
09	Extension and awareness	8.75	3.75	6.00	4.00	6.50	8.75	3.75	6.00	4.00	6.50	58.00	2.56%
10	Maintenance & Infrastructure Development	49.60	68.80	38.00	38.00	37.00	49.60	68.80	38.00	38.00	37.00	462.80	20.45%
11	Research Campaining Equipments	8.35	0.00	3.25	4.00	1.60	8.35	0.00	3.25	4.00	1.60	34.40	1.52 %
12	Veterinary care	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	20.00	0.88 %
Total		253.01	250.86	214.66	238.71	212.31	227.01	230.36	197.16	221.21	217.31	2262.60	100%

Financial Lay out 2021-31

Para. No. in Part II of the Management Plan	Activities / Sub-activities	2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30		2030-31	
		Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)	Physical Target	Budget (Rs. in Lakh)
5.2.1	**Habitat Management**																				
5.2.1.a	**Plantation and promotion of natural regeneration**																				
	Plantation work	6000 Rft @ 215/ 20000 plants @ 29.00	20.00	6000Rft @215/ 20000 plants@ 29.00	20.00	6000Rft @ 215/ 20000 plants@ 29.00	20.00	6000Rft @ 215/ 20000 plants @ 29.00	20.00	6000Rft @ 215/ 20000 plants @ 29.00	20.00	6000Rft @ 215/ 20000 plants @ 29.00	20.00	6000Rft @ 215/ 20000 plants @ 29.00	20.00	6000Rft @ 215/ 20000 plants @ 29.00	20.00	6000Rft @ 215/ 20000 plants @ 29.00	20.00	6000Rft @ 215/ 20000 plants @ 29.00	20.00
	Protection of regeneration by way of Barbed wire fencing	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00	Lump-sum	3.00
5.2.1.b	**Pasture development**																				
	Identify and map degraded pastures for key species	1 survey	5.00							1 survey	5.00										
	Temporary release of degraded pastures from livestock	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50	1 consultation with locals and migratory herders	0.50
	Restoration of pastures by sowing high yielding Grass seeds			50 ha	3.00	100 ha	5.00	100 ha	5.00	100 ha	5.00			50 ha	3.00	100 ha	5.00	100 ha	5.00	100	5.00
	Protection of restored pastures from grazing			50 ha	1.00	100 ha	2.00	100 ha	2.00	100	2.00			50 ha	1.00	100 ha	2.00	100 ha	2.00	100	2.00
5.2.1.c	**Soil-moisture conservation**																				
	Construction of structures for retaining moisture in soil by way way of DRSM/ Crate bunds	500 DRSM	8.50	500 DRSM /Crate Bunds	8.50	500 DRSM/ Crate Bunds	8.50	500 DRSM/ Crate bunds	8.50	500 DRSM/ Crate bunds	8.50	500 DRSM	8.50	500 DRSM / Crate Bunds	8.50	500 DRSM/ Crate Bunds	8.50	500 DRSM/ Crate bunds	8.50	500 DRSM/ Crate bunds	8.50
5.2.1.d	**Fire control**																				

	Creation and maintenance of fire lines	5 km	4.00	5 km	4.00	5 km	4.00	5 km	4.00	5 km	4.00	5 km	4.00	5 km	4.00	5 km	4.00	5 km	4.00	5 km	4.00
	Deployment of fire-watchers	8 watcher for 4 months	2.59	8 watcher for 4 months	2.59	8 watcher for 4 months	2.59	8 watcher for 4 months	2.59	8 watcher for 4 months	2.59	8 watch-er for 4 months	2.59	8 watcher for 4 months	2.59	8 watcher for 4 months	2.59	8 watch-er for 4 months	2.59	8 watcher for 4 months	2.59
	Procurement of fire fighting equipment	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00
5.2.1.e	**Livestock grazing control**																				
	Demarcation/ delineation of boundaries	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00	50@ 6000	3.00
	Control of live-stock grazing by migratory herds throughout KNP & Limber, Lachi-pora	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05
	Control grazing by non-bonafide herders within the NP	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05
	Alternate grazing grounds in less important areas for locals	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05	15 labours for 4 months	4.05
5.2.1.f	**Removal of unwanted plant species**																				
	Mapping of weed infested areas	Lump-sum	1.00							Lump-sum	1.00	Lump-sum	1.00							Lump-sum	1.00
	Understanding the phenology of weeds	Lump-sum	1.00							Lump-sum	1.00	Lump-sum	1.00							Lump-sum	1.00
	De-weeding op-erations (3-Year Cycle)			100 ha	2.00	100 ha	2.00	100 ha	2.00	100 ha	2.00			100 ha	2.00	100 ha	2.00	100 ha	2.00	100 ha	2.00
	Monitoring the cleared sites					Lump-sum	1.00	Lump-sum	1.00							Lump-sum	1.00	Lump-sum	1.00		
	Plantation/sow-ing of seeds of native plants in cleared plots					Lump-sum	1.00	Lump-sum	1.00							Lump-sum	1.00	Lump-sum	1.00		
5.2.2	**Protection**																				
5.2.2.a	**Boundary demarcation and securement**																				
	Chainlink fencing	2275 Rft	25.00	2275Rft	25.00	2275Rft	25.00	2275Rft	25.00	2275Rft	25.00	2275 Rft	25.00	2275Rft	25.00	2275Rft	25.00	2275Rft	25.00	2275Rft	25.00
5.2.2.b	**Wildlife crime prevention**																				
	Construction and maintenance of patrolling paths	5 km	2.30	5 km	2.30	5 km	2.30	5 km	2.30	5 km	2.30	5 km	2.30	5 km	2.30	5 km	2.30	5 km	2.30	5 km	2.30
	Vehicle hiring and running cost for patrolling	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.20	Lump-sum	1.20	Lump-sum	1.40	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.20	Lump-sum	1.20	Lump-sum	1.40
	Communication equipment for protection force	10 units of cell phones	0.70			10 units of cell-phones	0.80					10 units of cell-phones	0.70			10 units of cell-phones	0.80				

	Hiring causal wagers for patrolling	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07	15 persons for 6 months	6.07
5.2.2.c	**Capacity building of staff**																			
	Wildlife crime prevention and patrolling training	Fresh training (2)	3.00	Refresher Training (1)	1.00	Refresher Training (1)	1.00	Fresh Training (1)	3.00	Refresher Training (1)	1.00	Fresh Training (2)	3.00	Refresher Training (1)	1.00	Refresher Training (1)	1.00	Fresh Training (2)	3.00	Refresher Training (1)	1.00
5.2.2.d	**Coordination with other enforcement agencies**																			
	Holding stakeholder workshops	1 Workshop	0.50	1 Workshop	0.60	1 Workshop	0.70	1 Workshop	0.80	1 Workshop	0.90	1 Workshop	0.50	1 Workshop	0.60	1 Workshop	0.70	1 Workshop	0.80	1 Workshop	0.90
5.2.3	**Restoration of the wild medicinal plants**																			
5.2.3.a	**Facilitate natural regeneration**																			
	Survey to identify sites	1 survey	2.00									1 survey	2.00							
	Measures to reduce threats and ensure protection			1 consultation with herders and locals for social fencing	1.00	Monitoring of these areas	1.00	Monitoring of these areas	1.20	Monitoring of these areas	1.40			1 consultation with herders and locals for social fencing	1.00	Monitoring of these areas	1.00	Monitoring of these areas	1.20	Monitoring of these areas	1.40
						consultation with herders and locals for social fencing	1.20	consultation with herders and locals for social fencing	1.30	consultation with herders and locals for social fencing	1.40					consultation with herders and locals for social fencing	1.20	consultation with herders and locals for social fencing	1.30	consultation with herders and locals for social fencing	1.40
5.2.3.b	**Assisted regeneration of medicinal plant**																			

	Raising of Medicinal plant nursery	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00
	Plantation and post-plantation care	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50	Lump-sum	0.50
5.2.4	**Management of human-wildlife interface**																				
5.2.4.a	**Situation analysis**																				
	Primary and secondary survey for documentation of human-wildlife conflict cases	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00	1 survey	1.00
	Purchase of Cages	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00	2 Cages @ 1.50	3.00
	Tranquilizing Gun	1 No	6.50	1 No	6.50	1 No	6.50	1 No	6.50	1 No	6.50	1 No	6.50							1 No	6.50
	Purchase of drugs/dots/nets/ ladder/belts for immobilization	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00	Lump sum	5.00
	Purchase of rescue van	1 No	10.00	1 No	10.00	1 No	10.00	1 No	10.00												
	Purchase of Motor bikes	1No	1.00	1No	1.00	1No	1.00	1No	1.00												
	Purchase of fuel		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
	Purchase of Utility Vehicle	1 No	10.00																	1 No	10.00
5.2.4.b	**Preventive measures**																				
	Organizing awareness drives among locals and visitors	3 Awareness camps	1.50	3 Awareness camps	1.60	3 Awareness camps	1.70	3 Awareness camps	1.80	3 awareness camps	1.90	3 Awareness camps	1.50	3 Awareness camps	1.60	3 Awareness camps	1.70	3 Awareness camps	1.80	3 awareness camps	1.90
	Constituting and training local youths as Primary Response Team (PRT)	2 PRTs	1.20	4 PRTs	2.50	4 PRTS	2.50	4 PRTs	2.60	4 PRTs	2.60	2 PRTs	1.20	4 PRTs	2.50	4 PRTS	2.50	4 PRTs	2.60	4 PRTs	2.60
5.2.4.c	**Reactive measures**																				
	Construction of Rescue Center	2 No	20.00					2 No	20.00			2 No	20.00					2 No	20.00		
	Procurement and maintenance of rescue vehicle			1 vehicle	15.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00			1 vehicle	15.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00
	Training of staff to improve their capacity	1 training	2.0	refresher	1.0	refresher	1.0	refresher	1.20	1 training	2.50	1 training	2.0	refresher	1.0	refresher	1.0	refresher	1.20	1 training	2.50
5.2.5	**Eco-development**																				
5.2.5.a	**EDC and micro-planning**																				

	Formation of village level eco-development committees and providing of various incentives like Gas Cholas, Pressure cookers, solar lanters etc.	2 villages	1.00	2 villages	1.00	2 villages	1.00	2 villages	1.00	2 villages	1.00	2 villages	1.00	2 villages	1.00	2 villages	1.00	2 villages	1.00	2 villages	1.00
	Entry-point activities like providing Public convenience	2 villages	4.00	2 villages	4.00							2 villages	4.00	2 villages	4.00						
	Implementation of select prescriptions of the eco-development micro-plan as per project report (Culverts)			4 villages	12.00	4 villages	12.00	4 villages	14.00	4 villages	14.00			4 villages	12.00	4 villages	12.00	4 villages	14.00	4 villages	14.00
5.2.6	**Eco-tourism**																				
5.2.6.a	**Eco-tourism planning**																				
	Mapping of eco-tourism zone	Two eco-tourism sites	1.00									Two eco-tourism sites	1.00								
	Eco-tourism plan	1 plan	1.00									1 plan	1.00								
	Errection of Hoardings/ Broachers/Publicity Material,	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00
5.2.6.b	**Involving locals in eco-tourism**																				
	Constitution of eco-tourism societies	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00
	Capacity building of eco-tourism society members	1 training	1.00	1 training	1.00	1 training	1.00	1 training	1.00	1 training	1.00	1 training	1.00	1 training	1.00	1 training	1.00	1 training	1.00	1 training	1.00
	Establishing and maintaining homestays	Home stay	0.50	Home stay	0.50	Home stay	0.50	Home stay	0.50	Home stay	0.50	Home stay	0.50	Home stay	0.50	Home stay	0.50	Home stay	0.50	Home stay	0.50
5.2.7	**Research and Monitoring**																				
	Annual monitoring of threatened species /Census	Lump-sum	3.00	Lump-sum	3.50	Lump-sum	4.00	Lump-sum	4.50	Lump-sum	5.00	Lump-sum	3.00	Lump-sum	3.50	Lump-sum	4.00	Lump-sum	4.50	Lump-sum	5.00
	Study the impact of livestock grazing pressure on alpine pastures and mountain ungulates by engaging GRF	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00

	Update information on the major threatsby engaging GRF	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00
	Mapping resource useby engaging GRF	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00
	Inventory of biodiversityby hiring computer trained person	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00	Lump-sum	1.00
5.2.9	**Extension and awareness**																				
	Develop and maintain a dedicated website for the park	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25	Lump-sum	0.25
	Printing and displaying publicity material	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.50	Lump-sum	2.50	Lump-sum	3.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.50	Lump-sum	2.50	Lump-sum	3.00
	Observing Foundation Day of the NP	1 event	0.50	1 event	0.50	1 event	0.50	1 event	0.50	1 event	0.50	1 event	0.50	1 event	0.50	1 event	0.50	1 event	0.50	1 event	0.50
	Conducting guided tour for local schools students	4 tours	1.00	4 tours	1.00	4 tours	1.00	4 tours	1.00	4 tours	1.00	4 tours	1.00	4 tours	1.00	4 tours	1.00	4 tours	1.00	4 tours	1.00
	Displays at the 'Nature Interpretation Centre'	Lump-sum	5.00	Lump-sum	0.50	Lump-sum	2.00	Lump-sum	0.50	Lump-sum	2.00	Lump-sum	5.00	Lump-sum	0.50	Lump-sum	2.00	Lump-sum	0.50	Lump-sum	2.00
5.2.10	**Maintenance and development of infrastructure**																				
5.2.10.a	**Infrastructure development**																				
	Construction of staff quarters	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00			1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00		
	Maintenance of staff quarters	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00
	Construction of watch towers	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00	1 No	15.00
	Construction of shelter sheds	1	5.00	1	5.00	1	5.00	1	5.00	1	5.00	1	5.00	1	5.00	1	5.00	1	5.00	1	5.00
	Construction of anti-poaching camps	1	1.00	1	1.00	1	1.00	1	1.00	1	1.00	1	1.00	1	1.00	1	1.00	1	1.00	1	1.00
	Tourist Gate and Check-Post	1	10.00	1	10.00	1	10.00					1	10.00	1	10.00	1	10.00				
	Building of the Nature Interpretation Centre with Tourist Information Centre	1			20.00							1			20.00						
5.2.10.b	**Communication and mobility**																				
	Motorbike for field staff	2	1.60	1	0.80							2	1.60	1	0.80						
	Four-wheeler patrolling vehicle for field staff			1	7.0					1	14.00			1	7.0					1	14.00
5.2.10.c	**Research and Camping equipment**																				
	Binoculars	5 pairs	0.60							5 pairs	0.60	5 pairs	0.60							5 pairs	0.60
	Camera traps	10	2.25	10	2.25	10	2.25					10	2.25	10	2.25	10	2.25				
	GPS receiver	5 units	1.00					5 units	1.00			5 units	1.00					5 units	1.00		

	Tents	5	1.00			5	1.00			5	1.00			5	1.00			5				5	1.00									
	Sleeping bags	10	0.50	10	0.50			10	0.50	10	0.50	10	0.50			10	0.50					10	0.50									
	Drones	2	3.00					2	3.00			2	3.00																			
5.210d	**Veterinary care**																															
	Veterinary care/ Vaccination/ Treatement	Lum-sum	2.00	Lumb-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lumsum	2.00	Lumb-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00	Lump-sum	2.00
	Total		**253.01**		**250.86**		**214.68**		**238.71**		**212.31**		**227.01**		**230.36**		**197.76**		**221.21**		**217.60**

REFERENCES

- Ahmad, K., Sathyakumar, S., and Qureshi, Q. 2010.Conservation status of the last surviving wild population of Hangul or Kashmir Deer Cervus elaphus hanglu in Kashmir, India.Indian Forester. Vol. 139 (10):
- .Ahmed, R. 2007. Markhor in Kaj-I-Nag range: An intensive study in the Limber WLS. Progress Report (May 2006 to January 2007).
- Ahmed, R., Bhatnagar, Y. V., Mishra, C., Trivedi, P., Raghunath, R. and Kaul, R. 2010. Status and Conservation of Markhor in Jammu & Kashmir. Markhor in Kazinag National Park: Important habitats and interactions with livestock. Project report (2009-2010).
- Ali, S. 1981. The Himalaya in Indian Ornithology *In. Lall, J.S. (Ed.)* The Himalaya*:* AspectsofChange*.* Oxford University Press, New. Delhi. pp. 16-31. Richard, C. 1999.
- Anonymous 2004.Indian bureau of mines. Nagpur. Indian Mineral Year Book; 558–69.
- Baba, M. M. 2005. Management Plan for Limber Wildlife Sanctuary 2005-2009. Wildlife Division North, Department of Wildlife Protection, Jammu and Kashmir Government, Srinagar.
- Bagchi, S., Mishra, C. and Bhatnagar, Y. V. 2004. Conflicts between traditional pastoralism and conservation of Himalayan ibex *(Capra siberica)* in the Trans-Himalayan mountains, ***Animal Conservation,*** 7: 121-128.
- Bhatnagar, Y. V. 2008. Relocation from Wildlife Reserves in the Greater and Trans-Himalayas: Is it Necessary? ***Conservation and Society.*** 6(3): 263-270.
- Bhatnagar, Y. V., Mishra, C., Peerzada, R. A., Trivedi, P., Raghunath, R. and Kaul, R. 2008. Conservation of the Markhor in Kashmir. Nature Conservation Foundation, Mysore.
- Bhatnagar, Y. V., Ahmed, R., Kyarong, S., Ranjitsinh, M. K. Seth. C. M., Lone, I., Easa, P., Kaul, R. and Raghunath, R. 2009. Endangered markhor *(Capra falconeri)* in India: through war and insurgency. ***Oryx,*** 43(03): 407-411.
- Champion, H. G. and Seth, S. K. 1968.A Revised Survey of Forest Types of India. Forest Research Institute. Dehradun, India.
- Charoo, S., Sharma, L.K., and Sathyakumar, S. 2010. Distribution and Relative Abundance of Kashmir Red Deer or Hangul (Cervus elaphus hanglu) at Dachigam National Park, Kashmir, India. Galemys 22 (nº especial): 171-184
- Choudhury, S., Ali, M., Mubashir, T., Ahmed, S. N., Sofi, M. N., Mughal, I., Sarma, U. K., Shrivastava, A. K. and Kaul, R. 2008. Predator Alert: Attacks on humans by leopards and Asiatic black bear in the Kashmir valley- Analysis of case studies and spatial patterns of elevated conflict. Wildlife Trust of India, New Delhi, India.
- Dar, A. R., Dar, G. H. and Reshi, Z. 2006. Recovery and Restoration of some Critically Endangered endemic Angiosperms of the Kashmir Himalaya. ***Journal of Biological Sciences,*** 6(6): 985-991.
- FSI 2009.India State of Forest Report.Published by Forest Survey of India.
- Fullar, R. A. and Garson, P. J. (eds) 2000. Pheasants: Status Survey and Conservation Action Plan 2000-2004. IUCN, Gland, Switzerland and Cambridge, UK and World Pheasant Association, Reading, UK.
- Green, M. J. B. 1986. The Distribution, Status and Conservation of the Himalayan Musk Deer *Moschus chrysogaster.****Biological Conservation,*** 35: 347-375.
- Holloway C. (1971). Dachigam Wildlife Sanctuary, Kashmir with specialreference to the status and management of Hangul. Proc.IUCN. 11th Technical Meeting IUCN Publ. 19: 109-112.

- Harmon, D. 1994. Coordinating Research and Management to enhance Protected Areas.IUCN- The World Conservation Union.
- Intesaar, S. 2009. Recovery Plan for Markhor. Dept. of Wildlife Protection, Jammu and Kashmir.
- IUCN 2012.www.iucn.org<downloaded on 12 April 2012>.
- Javed, S. 1992. Birds of Limber Valley Forest (Jammu and Kashmir).***News Letter of Bird Watchers,*** 32: 13-15.
- Karan, P. P. 1966.Geographic region of Himalaya. ***Bulletin of Tibetology.***3(2): 11.
- Kaul, R. 2002. National Bio-Diversity Strategy and Action Plan, Western Himalaya Eco-Region Working Group- J&K. Submitted by World Pheasant Association- South Asia Field Office (Gurgaon), Haryana.
- Kaul, R., Hilaluddin, Jandrotia, J. S. and McGown, P. J. K. 2004.Hunting of large mammals and pheasants in the Indian western Himalaya.***Oryx,*** 38(4): 1-6.
- Kurtz F. (1978). Threatened Deer. Proceedings of A. IUCN threatenedDeer Programme Kashmir Deer (*Cervus elaphus hangul*) inDachigam
- Lone, B. A., Chisthi, M. Z. and Ahmed, F. 2011. Prevalence of Coccidia & Gastrointestinal Nematode Infections in Goats of Baramulla District of Kashmir Valley.***Global Veterinaria,*** 7(1): 27-30.
- Malik, A. R. and Siddique, M. A. A. 2011.Ethno-medicinal studies on some important medicinal plants used by the tribals of North- Kashmir.***Research Journal of Medicinal Plant,*** 5 (5): 515-530.
- McGeoh, M. A., Butchart, S. H. M., Spear, D., Marais, E., Kalynhans, A. S., Chanson, J. and Hoffmann, M. 2010. Global Indicators of Biological Invasion: Species numbers, Biodiversity Impact & Policy responses. ***Diversity & Distributions,*** 16(1): 95-108.
- Mishra, C., Wieren, S. V., Heitkonig, I. and Prins, H. 2002. A theoretical analysis of competitive exclusion in a Trans- Himalayan large- herbivore assemblage, ***Animal Conservation,*** 5(03): 251-258.
- Nawaz, R. 2002. Kaigah markhor survey report. WWF- Pakistan.
- Ranjitsinh, M. K., Seth, C. M., Ahmed, R., Bhatnagar, Y. V. and Kyarong, S. S. 2005. Goats on the Border: A Rapid Assessment of the Pir Panjal Markhor in Jammu and Kashmir: Distribution, Status and Threats. Wildlife Trust of India. New Delhi, India.
- Raza, M., Ahmed, A. and Mohammad, A. 1978. The valley of Kashmir, a Geographical Interpretation (New Delhi: Vikas Publication House).
- Rodgers, W. A. and Panwar, H. S. 1988. Planning a wildlife protected area network in India. Vol.I and II.Wildlife Institue of India, Dehradun, India.
- Schaller G.B. (1969). Observation on Hangul or Kashmir stag (*Cervuselaphus hangul*). J. *Bom. Nat. His. Soc*. 66 (1): 1-7.
- Sehgal, K.L. 1988. Ecology and fisheries of mountain streams of the North-Western Himalayas.Thesis for the award of D.Sc. degree, University of Meerut, India.
- Sekar, K.C. 2012. Invasive alien plants of Indain Himalaya Region- Diversity and Implication.***American Journal of Plant Species,*** 3: 177-184.
- Singh, N. J. and Milner- Gulland, E. J. 2011.Monitoring ungulates in Central Asia: current constraints and future potential.***Oryx,*** 45(1): 38-49.
- Vadrevu, K. P., Ellicott, E., Gigilo. L., Badrinath, K. V. S., Vermote E., Justice. C. and Lau, K. M. L. 2012. Vegetation fires in the Himalayan region- Aerosol load, black carbon emissions and smoke plume hights. ***Atmospheric Environment,*** 47: 241-251.
- Virjee, Dhar, U. and Kachroo, P. 1989. Cytogeography of some Endemic Taxa of Kashmir Himalaya. *Proc. Ntl. Sci. Acad.* 55: 177-184.
- Wadia, D. N. 1943. Pliocene – Pleistocene boundary in North- western India. ***Proc. Nat. Inst. of Sci. India,*** 9(1): 37-42.
- The Wildlife Protection Act 1972 (2006 amendment). Wildlife Trust of India, Natraj Publishers 2009.
- www.jkwildlife.com Jammu and Kashmir Wildlife Protection Department

Appendix I

Checklist of Birds from Limber Wildlife Sanctuary &Kazinag National Park (Javed 1992, Baba 2005 & Ahmad 2010)

Sl	Common name	Scientific name	IUCN Status
Family Ardeiate:			
1	Grey Heron	*Ardea cinera*	LC
2	Pond Heron	*Ardeota grayil*	LC
3	Little Egret	*Egretta garzetta*	LC
4	Night Heron	*Nycticorax nycticorax*	LC
Family Accipitridae:			
5	Black Kite	*Milvus migrans linetus*	LC
6	Sparrow Hawk	*Accipiter nisus melasichistos*	LC
7	Golden Eagle	*Aquila chrysaetus*	LC
8	Lammergeier	*Gypaetus barbatus*	LC
9	Himalayan Griffon Vulture	*Gyps himalayensis*	LC
10	Marsh Harrier	*Circus aeruginosus*	LC
11	Goshawk	*Accipiter gentilis*	LC
12	Besra Sparrow Hawk	*Accipiter virgatus*	LC
13	Tawny Eagle	*Aquila rapax*	LC
14	Oriental Hobby	*Falco severus*	LC
15	Kestrel	*Falco tinnunuculus*	LC
16	Scavenger Vulture	*Neophron percnopterus*	EN
Family Falconidae:			
17	Hobby	*Falco subbuteo*	LC
Family Phasianidae:			
18	Himalayan Snow Cock	*Tetraogallus himalyensis*	LC
19	Chukar Partridge	*Alectoris chukar*	LC
20	Monal	*Lophophorus impejanus*	LC
21	Koklass	*Pucrasia macrolopha*	LC
22	Western Tragopan	*Tragopan melanocephalus*	VU
23	Cheer Pheasant	*Catreus wallichii*	VU
Family Charadrhdae:			
24	Common Sandpiper	*Triga hypoleucos*	LC
Family Laridae:			
25	Whiskered Tern	*Childonias hybrid*	LC
Family Columbidae:			
26	Snow Pigeon	*Columba leuconota*	LC
27	Hill Pigeon	*C. rupestris*	LC
28	Speckled Wood Pigeon	*C. eversmanni*	VU
29	Blue Rock Pigeon	*C. livia*	LC
30	Roufus Turtle Dove	*Streptopelia orientalis*	LC
31	Indian Ring Dove	*S. decaocto*	LC
Family Psittacidae:			
32	Slatyheaded Parakeet	*Psittacula himalayana*	LC
Family Cuculidae:			
33	Common Cuckoo	*Cuculus canorus*	LC

34	Small Cuckoo	*Cuculus poliocephalus*	LC
35	Himalayan Cuckoo	*C. saturaius*	LC
Family Strigidae			
36	Scops Owl	*Otus brucei*	LC
Family Alcedinidae:			
37	Himalyan Pied Kingfisher	*Ceryle lugubris*	LC
38	Lesser Pied Kingfisher	*C. rudis*	LC
39	Common Kingfisher	*Alcedo atthis*	LC
40	Whitebreasted Kingfisher	*Halcyon symrnensis*	LC
Family Meropidae:			
41	European Bee-Eater	*Meropsapi aster*	LC
Family Corahdae:			
42	European Roller	*Coracias garrulous*	NT
Family Upupidae:			
43	Hoopoe	*Upupa epops*	LC
Family Picidae:			
44	Wryneck	*Jynx torquilla*	LC
45	Scalybellied Green Woodpecker *Picus squamatus*	LC	
46	Blacknaped Green Woodpecker	*Picus canus*	LC
47	Himalayan Pied Woodpecker	*Dendrocopos himalayensis*	LC
48	Brownfronted Pied Woodpecker *Picoides auriceps*	LC	
49	Yellowfronted Pied Woodpecker *Picoides maharattensis*	LC	
Family Alaudidae:			
50	Eastern Skylark	*Alauda galgula*	LC
Family Hirundinidae:			
51	Barn Swallow	*Hirundo rustica*	LC
52	Wire tailed Swallow	*Hirundo smithii*	LC
Family Landidae:			
53	Rufousbacked Shrike	*Lanius schach*	LC
Family Oriolidae:			
54	Golden Oriole	*Oriolus oriolus*	LC
55	Black Headed Oriole	*Oriolus xanthornus*	LC
Family Dicruricae:			
56	Ashy Drongo	*Dicturus leucophaeus*	LC
57	Black Drongo	*D. adsimilis*	LC
Family Sturnidae:			
58	Straling	*Sturnus vulgaris*	LC
59	Common Myna	*Acridotheres ginginianus*	LC
Family Corvidae:			
60	Blackthroated Jay	*Garrulus lanceolatus*	LC
61	Yellowbilled Blue Magpie	*Cissa flavirostris*	LC
62	Nutcracker	*Nucifraga caryocatactes*	LC
63	Yellowbilled or Alpine Chough	*Pyrrhocorax graculus*	LC
64	Redbilled Cough	*P. pyrrhocorax*	LC
65	Jackdaw	*Corvus monedula*	LC
66	Jungle Crow	*C. macrohynchos*	LC
67	Raven	*C. corax*	LC

Family Campephagidae:			
68	Scarlet Minvet	*Pericrocotus flammeus*	LC
69	Longtailed Minvet	*P. ethologus*	LC
Family Pycnontidae:			
70	White cheeked Bulbul	*Pycnonotus leucogenys*	LC
71	Black Bulbul	*Hypsipetes madagascariensis*	LC
Family Muscicapidae:			
72	Variegated Laughing Thrush	*Garrulax variegates*	LC
73	Streaked Laughing Thrush	*Garrulax lineatus*	LC
74	Scooty Flycatcher	*Muscicapa sibirica*	LC
75	Rufous tailed Flycatcher	*M. ruficauda*	LC
76	Kashmir Redbreasted Flycatcher	*Ficedula subrubra*	VU
77	Little Pied Flycatcher	*F. westermanni*	LC
78	Whitebrowed Blue Flycatcher	*Culicicapa celonensis*	LC
79	Slaty-blue Flycatcher	*Muscicapa leucomelanura*	LC
80	Grey headed Canary Flycatcher	*Culicicepa ceylonensis*	LC
81	Paradise Flycatcher	*Terpsiphone paradisi*	LC
82	Indian Great Reed Warbler	*Acrocephalus arundinaceus*	LC
83	Lesser Whitethroat	*Syliva curruca*	LC
84	Plain Leaf Warbler	*Phylloscopus neglectus*	LC
85	Tytler's Leaf Warbler	*P. tytleri*	NT
86	Tickell's Leaf Warbler	*P. affinis*	LC
87	Sulphur Bellied Leaf Warbler	*P. griseolus*	LC
88	Yellow bowed Leaf Warbler	*P. inornatus*	LC
89	Grey hooded Warbler	*Seicerus xeihthoschistos*	LC
90	Gold crest	*Regulus regulus*	LC
91	Himalayan Rubythroat	*Luscinia pectoralis*	LC
92	Red-flanked Bluetail	*Tarsiger cyanurus*	LC
93	Kashmir Black Redstart	*Phoenicurus ochruros phoenicuroides*	LC
94	Guldenstadt's Redstart	*P. erythrogaster*	LC
95	Plumbeous Redstart	*Rhyacornis fuliginosus*	LC
96	Little Forktail	*Enicurus scouleri*	LC
97	Spotted Forktail	*Enicurus maculates*	LC
98	White capped Redstart	*Chaimarrornis leucocphalus*	LC
99	Blue Whistling Thrush	*Myophonus caeruleus*	LC
100	Tickell's Thrush	*Turdus unicolor*	LC
101	Mistle Thrush	*Turdus viscivorus*	LC
Family Troglodytidae:			
102	White-breasted Dipper	*Cinclus cinclus*	LC
103	Brown Dipper	*C. pallasii*	LC
Family Paridae:			
104	Great Tit	*Parus major*	LC
105	Green-backed Tit	*P. monticolus*	LC
106	Black Crested Tit	*P. melanolophus*	LC
107	Fire-capped Tit	*Cephalopyrus flammniceps*	LC
Family Sittidae:			
108	Kashmir Nuthatch	*Sitta cashmirensis*	LC

Family Certhidae:			
109	Himalayan Tree Creeper	*Certhia himalayana*	LC
Family Motachillidae:			
110	Rosy Pipit	*Anthus roseatus*	LC
111	Long billed Pipit	*Anthus similis*	LC
112	Yellow Wagtail	*Motacilla flava*	LC
113	Yellow-headed Wagtail	*Motacilla citreola*	LC
114	Grey Wagtail	*Motacilla cinerea*	LC
115	Pied or White Wagtail	*Motacilla alba*	LC
Family Zoseropidae:			
116	Oriental White Eye	*Zosterops palpebrosa*	LC
Family Ploceidae:			
117	House Sparrow	*Passer domesticus*	LC
118	Eurasian Tree Sparrow	*Passer montanus*	LC
119	Russet Sparrow	*Passer rutilans*	LC
Family Fringillidae:			
120	Black & Yellow Grosbeak	*Mycerobas icterioides*	LC
121	Eurasian Goldfinch	*Carduelis carduelis*	LC
122	Himalayan Greenfinch	*Carduelis spinoides*	LC
123	Common Rosefinch	*Carpodacus erythrinu*	LC
124	Orange Bullfinch	*Pyrrhula aurantiaca*	LC
Family Emberizidae:			
125	Rock Bunting	*Emberiza cia*	LC
Family Apodidae:			
126	Himalayan Swiftlet	*Collocalia brevirostris*	LC
127	White Rumped Spinetail	*Zoonavena sylvatica*	LC
128	Alpine Swift	*Apus melba*	LC
129	Tree Swift	*Apus apus*	LC

Appendix II

Faunal species of Limber WLS/ Kazinag NP

S.N.	Common name	Scientific name	WPA status	IUCN status
1.	Markhor	*Capra falconeri*	Schedule I	**EN**
2.	Brown Bear	*Ursus arctos isabellenus*	Schedule I	**LC**
3.	Common Leopard	*Panther pardus*	Schedule I	**NT**
4.	Asiatic Black Bear	*Ursus thibetanus*	Schedule II	**VU**
5.	Himalayan Musk Deer	*Moschus leucogaster*	Schedule I	**EN**
6.	Goral	*Nemorhaedus goral*	Schedule III	**LC**
7.	Kashmir Langur	*Semnopithecusajax*	Schedule II	
8.	Rhesus Macaque	*Macaca mulatta*	Schedule II	**LC**
9.	Red Fox	*Vulpes vulpes*	Schedule II	**LC**
10.	Jungle Cat	*Felis chaus*	Schedule II	**LC**
11.	Leopard Cat	*Felis bengalensis*	Schedule I	**LC**
12.	Brown Musk Shrew	*Crocidura murina*		
13.	Small Indian Mangoose	*Herpestes auropunctatus*		
15.	Small Kashmir Flying Squirrel	*Eoglaucomys fimbriatus*	Schedule II	**LC**

Appendex III

CHECK LIST OF BUTTERFILES OF KAZINAG, LIMBER & LACHIPORA WLS.

Family PAPILIONIDAE		
1.	Banded Apollo	*Paranassius delphius*
2.	Regal Apollo	*Paranassius charltonius*
3.	Common Blue Apollo	*Paranassius hardvrickei*
4.	Common Red Apollo	*Paranassius epaphus*
Family SATYRIDA		
1.	Brown Argus	*Dallacha hyagriva*
2.	Nountian Argus	*Callerebia shallada*
3.	Meadow Brown	*Maniola pulchara*
4.	Narrowbanded Satyr	*Aulocera brhamnius*

Family NYMPHALIDAE		
1.	Large Tortoise Shall	*Nymphalis xanthomelas*
2.	Blackleg Tortoise Shall	*Nymphalis polychloros*
3.	Mountain Tortoise Shall	*Aglais urtiacae*
4.	Indian Tortoise Shall	*Aglais cashmirensis*
5.	Chocolate Pansy	*Precis iphita*
6.	Lemon Pansy	*Precis lemonias*
7.	Orange Oakleaf	*Kallima inachus*
Family LIBYTHEIDAT		
1.	Common Back	*Libythea lepita*
Family RIODINITAT		
1.	Lesser Panch	*Dodona dipoea*
2.	Tailed Punch	*Dodona eugenes*

Appendix-V

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
NOTIFICATION

New Delhi, ..., 2021

S.O ..... (E).- The following draft notification, which the Central Government proposes to issue in exercise of the powers conferred by sub-section (1), read with clause (v) and clause (xiv) of sub-section (2) and sub-section (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) is hereby published, as required under sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, for the information of the public likely to be affected thereby; and notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of sixty days from the date on which copies of the Gazette containing this notification are made available to the public;

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may forward the same in writing, for consideration of the Central Government within the period so specified to the Secretary, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi-110 003, or send it to the e-mail address of the Ministry at esz-mef@nic.in.

Draft Notification

WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary are spread over the total area of 181 square kilometres in Jammu province, Jammu and Kashmir.

AND WHEREAS, the Kazinag National Park comprising an area of 89.00 square kilometres has been notified as National Park vide notification no. S.R.O: 425 dated 18th December, 2007. Limber Wildlife Sanctuary comprising an area of 12 square kilometres has been notified as Wildlife Sanctuary vide S.R.O No: 157 dated 19th March 1987 and Lachipora Wildlife Sanctuary comprising an area of 80.00 square kilometres has been notified as Wildlife Sanctuary notified vide S.R.O No: 150 dated 19th March 1987.

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary, and Lachipora Wildlife Sanctuary form the most important natural heritage representing a great bio-diversity of flora and fauna. The area is known to harbour the last viable population of Pir Panjal Markhor *(Capra falconeri)* and endemic Kashmir musk deer (Moschus cupreus). The area provides pristine locations for nature lovers, bird watchers, mountaineers, ecologists, researchers and tourists.

AND WHEREAS, the physiographical and topographical terrain of the area supports a mesophytic vegetation of temperate conifers arranged in an altitudinal sequence and a variety of forest types, lush green meadows of alpine habitats makes it more unique for such a biological and ecological heritage and therefore, calls upon its effective conservation, preservation and better propagation of wildlife species in order to protect it for future generations.

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary consists of coniferous forests with deodar wood cover, blue pine forests, silver fir canopy, broad-leaved woodland, birch forest, isoden scrub, savana scrub and alpine pastures. The area also has a diversity of faunal species such as Deodar (*Cedrus deodara*), Parrotia (*Parrotiopsis jacquemontiana*), kail (*Pinus walllichina),* fir (*Abies Pindrow*), spruce (*Picea smithiana*), horse chestnut (*Aesculus indica*), walnut (*Juglans regia*), *Acer cappadocicum*, *Betula utilis*, *Indigofera heterantha*, Viburnum grandiflorum,*Rosa webbiana*, *Lonicera quinquelocularis*, chinar (*Platanus orientalis*), *Juniperus recurva*, *Rhododendron anthopogon*, *Isodon rugosus*, *Pinus griffithii* etc.

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary, Lachipora Wildlife Sanctuary and Naganari Conservation Reserve fall in the North-West Himalayan province of Himalayan zone as per the bio-geographic demarcation of Jammu and Kashmir State by Rodgers and Pawar (1988). The faunal life is distinguished by the presence of many species of Indo-Chinese forms. The faunal elements show affinities with Northern Paleartic fauna as well as Eastern and Oriental fauna, forming a unique assemblage of great conservation value.

AND WHEREAS, the area has a wide variety of rare, threatened and endangered faunal species such as Asiatic black bear (*Ursus thibetanus)*, Himalayan brown bear (*Ursus arctos)*, common leopard *(Panthera pardus),* leopard cat (*Prionailurus bengalensis),* jungle cat *(Felis chaus)*, red fox *(Vulpes vulpes)*, jackal *(Canis aureus)*, yellow-throated marten *(Martes flavigula)*, mountain weasel *(Mustela altaica)*, Indian porcupine *(Hystrix indica)*, Himalayan grey langur (*Semnopithecus ajax)*, Rhesus macaque *(Macaca mulatta)*, Himalayan grey goral *(Nemorhaedus bedfordi)*, Himalayan palm civet *(Paguma larvata)*, Indian wild pig *(Sus scorfa)*, Royle's pika *(Ochotona roylei)*, house shrew (*Suncus murinus),* Kashmir flying squirrel (*Eoglaucomys fimbriatus)etc.*

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary, Lachipora Wildlife Sanctuary are home to 120 species of birds representing about36 families. Some of the birds species present in the area are Himalayan griffon (*Gypsy himalayensis)*, bearded vulture *(Gypaetus barbatus)*, western tragopan *(Tragopan melanocephalus)*, cheer pheasant (*Catreus wallichii)*, Himalayan monal (*Lophophorus impejanus)*, koklass pheasant (*Pucrasia macrolopha)*, large-spotted nutcracker *(Nucifraga multipunctata)*, red-billed chough *(Pyrrhocorax pyrrhocorax)*, grey-headed canary flycatcher (*Culicicapa ceylonensis)*, Kashmir nuthatch *(Sitta cashmirensis)*, rock bunting *(Emberiza cia) etc*.

AND WHEREAS, it is necessary to conserve and protect the area, the extent and boundaries of Kazinag National Park, Limber Wildlife Sanctuary & Lachipora 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 5kilometers around the boundary of Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary, in the Union Territory of Jammu & Kashmir as Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary 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 of 69.97 square kilometers with an extent 0 (zero) to 5 kilometers around the boundary of Kazinag National Park, Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary. *The zero extent of the Eco-sensitive zone towards West and North-West direction is due to presence of actual Line of Control and also due to human settlements. Extent of Eco-sensitive zone in different directions (kilometers) as given below:-*

2.

Direction	Extent (kilometres)
North	1.5
North-East	1.5
East	0.05
South-East	5.0
South	0.05
South-West	0.05
West	0.00
North-west	0.00

The zero extent of the Eco-sensitive zone towards West and North-West direction is due to presence of actual Line of Control and also due to human settlements.

1. The boundary description of Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary and its Eco-sensitive Zone is appended as **Annexure-I.**

2. The maps of the Kazinag National Park, Limber Wildlife Sanctuary & Lachipora 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-IIE.**

3. Lists of geo co-ordinates of the boundary of Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary and Eco-Sensitive Zone are given in Table **A** and Table **B** of **Annexure-III.**

4. The list of village falling in the Eco-sensitive Zone along with their geo co-ordinates at prominent points is appended as **Annexure-IV.**

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 in the Union Territory.

1. 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.
2. 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:-

- Environment;
- Forests;
- Agriculture;
- Revenue;
- Urban Development;
- Tourism;
- Rural Development;
- Irrigation & Flood Control;
- Pollution Control Board;
- Municipal;
- Panchayati Raj; and
- Public Works Department.

3. 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.
4. 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.
5. 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.
6. 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.
7. The Zonal Master Plan shall be co-terminus with the Regional Development Plan.
8. 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) above, 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-

- Widening and strengthening of existing roads and construction of new roads;
- Construction and renovation of infrastructure and civic amenities;
- Small scale industries not causing pollution;
- Cottage industries including village industries; convenience stores and local amenities supporting eco-tourism including home stay; and
- Promoted activities given in 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.

    a. The Tourism Master Plan shall be prepared by the Union Territory Department of Tourism in consultation with the Union Territory Departments of Environment and Forests.
    b. The Tourism Master Plan shall form a component of the Zonal Master Plan.
    c. The Tourism Master Plan shall be drawn based on the study of carrying capacity of the Eco-sensitive Zone.
    d. The activities of eco-tourism shall be regulated as under, namely:-

        i. New construction of hotels and resorts shall not be allowed within one kilometer from the boundary of the protected area or upto the extent of the Eco-sensitive Zone, whichever is nearer:
        ii. 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;
        iii. 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 the National Tiger Conservation Authority (as amended from time to time) with emphasis on eco-tourism, eco-education and eco-development;
        iv. 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 carried out 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 carried out in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the rules made there under.
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 there under or standards stipulated by the 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 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 In-

dia 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 incompliance with applicable laws and efforts shall be made for use of cleaner fuels.

16. **Industrial units.–**
    a. 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.
    b. (b) 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, as amended from time to time 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 there under including the Coastal Regulation Zone, 2011 and 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

S. No.	Activity	Description
A. Prohibited Activities		
	Commercial mining, stone quarrying and crushing units.	All new and existing mining (minor and major minerals), stone quarrying and crushing units shall be 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 within Eco- sensitive Zone; 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.
	Setting of industries causing pollution (Water, Air, Soil, Noise, etc.).	New industries and expansion of existing polluting industries in the Eco-sensitive Zone shall not be permitted: 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, as amended from time to time, unless so specified in this notification and in addition, the non-polluting cottage industries shall be promoted.
	Establishment of major hydro-electric project.	Prohibited .
	Use or production or processing of any hazardous substance.	Prohibited.
	Discharge of untreated effluents in natural water bodies or land area.	Prohibited.
	Setting up of new saw mills.	New or expansion of existing saw mills shall not be permitted within the Eco-sensitive Zone.

	Setting up of brick kilns.	Prohibited.
	Commercial use of firewood	Prohibited.
	Use of polythene bags.	Prohibited .
	Undertaking activities related to tourism like over-flying the national park area by aircraft, hot-air balloons.	Prohibited .
B. Regulated Activities		
	Commercial establishment of hotels and resorts.	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: Provided that, beyond one kilometer from the 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.
	Construction activities.	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: Provided that, local people shall be permitted to undertake construction in their land for their use including the activities listed in sub-paragraph (1) of paragraph 3 as per building bye-laws to meet the residential needs of the local residents: Provided 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. Beyond one kilometer it shall be regulated as per the Zonal Master Plan.
	Small scale non polluting industries.	Non polluting industries as per classification of industries issued by the Central Pollution Control Board in February, 2016, as amended from time to time, 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.
	Felling of trees.	(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. (b)The felling of trees shall be regulated in accordance with the provisions of the concerned Central or State Act and the rules made there under.
	Collection of Forest Produce or Non-Timber Forest Produce.	Regulated under applicable laws.
	Erection of electrical and communication towers and laying of cables and other infrastructures.	Regulated under applicable laws of underground cabling may be promoted.
	Infrastructure including civic amenities.	Taking measures of mitigation, as per applicable laws, rules, regulation and available guidelines.
	Widening and strengthening of existing roads and construction of new roads.	Taking measures of mitigation, as per applicable laws, rules, regulation and available guidelines.
	Protection of Hill Slopes and river banks.	Regulated as per the applicable laws.
	Movement of vehicular traffic at night.	Regulated for commercial purpose under applicable laws.
	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.

	Discharge of treated waste water/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/effluent shall be regulated as per the applicable laws.
	Commercial extraction of surface and ground water.	Regulated under applicable laws.
	Establishment of large-scale commercial livestock and poultry farms by firms, corporate and companies.	Regulated (except as otherwise provided) as per applicable laws except for meeting local needs.
	Open Well, Bore Well, etc. for agriculture or other usage.	Regulated and the activity should be strictly monitored by the appropriate authority.
	Solid Waste Management.	Regulated as per the applicable laws.
	Introduction of Exotic species.	Regulated as per the applicable laws.
	Eco-tourism.	Regulated as per the applicable laws.
	Commercial Sign boards and hoardings.	Regulated as per the applicable laws.
C. Promoted Activities		
	Rain water harvesting.	Shall be actively promoted.
	Organic farming.	Shall be actively promoted.
	Adoption of green technology for all activities.	Shall be actively promoted.
	Cottage industries including village artisans, etc.	Shall be actively promoted.
	Use of renewable energy and fuels.	Bio-gas, solar light etc. shall be actively promoted.
	Agro-Forestry.	Shall be actively promoted.
	Plantation of Horticulture and Herbals.	Shall be actively promoted.
	Use of eco-friendly transport.	Shall be actively promoted.
	Skill Development.	Shall be actively promoted.
	Restoration of Degraded Land/ Forests/ Habitat.	Shall be actively promoted.
	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: -

S.N.	Constituent of the Monitoring Committee	Designation
1.	Deputy Commissioner, Baramulla	Chairman;
2.	An expert in the area of ecology and environment to be nominated by the Government of Jammu and Kashmir	Member;
3.	One representative of a Non-Governmental Organization working in the field of environment conservation to be nominated by the Government of Jammu and Kashmir	Member;
4.	Representative of Jammu and Kashmir Biodiversity Council	Member;
5.	District Officer, Jammu and Kashmir State Pollution Control Board, Baramulla	Member;
6.	Divisional Forest Officer, Jhelum Valley Forest Division	Member;
7.	Divisional Forest Officer, Langate Forest Division	Member;
8.	Wildlife Warden, North Division	Member Secretary

6. Terms of reference. –

1. The Monitoring Committee shall monitor the compliance of the provisions of this notification.
2. The tenure of the Monitoring committee shall be till further orders, provided that the non-official members of the Committee shall be nominated by the Union Territory Government from time to time.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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 performa appended at **Annexure-V**.
8. 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. Additional measures.-The Central Government and Union Territory Government may specify additional measures, if any, for giving effect to provisions of this notification.

8. Supreme Court, etc. orders.- 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.

ANNEXURE- I

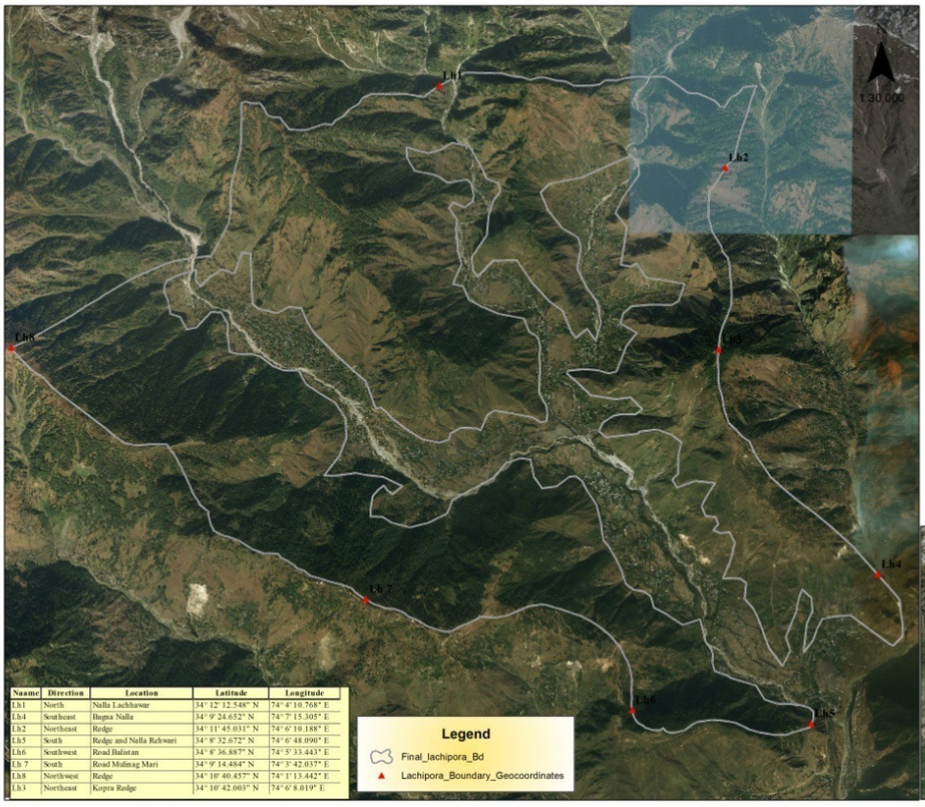
BOUNDARY DESCRIPTION OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARYAND ITS ECO-SENSITIVE ZONE IN THE UNION TERRITORY OF JAMMU & KASHMIR

Point	Longitude	Latitude	Distance	Remarks
1	74° 5′ 38.681″ E	34° 15′ 6.329″ N	50 m	Forest Area, Co/26 Rfd
2	74° 6′ 13.591″ E	34° 15′ 21.786″ N	1000 m	Forest area Open scrub, Co/25rfd
3	74° 9′ 41.404″ E	34° 14′ 33.668″ N	1000 m	Forest Area, Co/ 21Rfd, open scrub
4	74° 11′ 0.690″ E	34° 14′ 0.771″ N	1000 m	Forest Area, Co 20/Rfd
5	74° 14′ 12.003″ E	34° 14′ 25.858″ N	1000 m	Forest area, Co 16/Rfd
6	74° 14′ 48.264″ E	34° 13′ 40.732″ N	1000 m	chitte batin, Forest area
7	74° 14′ 4.618″ E	34° 13′ 3.929″ N	50 m	Forest Area, kawahill
8	74° 12′ 58.892″ E	34° 11′ 50.569″ N	1000 m	Village Hilan
9	74° 12′ 18.447″ E	34° 11′ 13.076″ N	2000 m	Forest Area, JV Divn, Katha Nar
10	74° 11′ 58.364″ E	34° 10′ 26.987″ N	1500 m	Forest Area, Dindwara Village
11	74° 11′ 59.366″ E	34° 9′ 14.534″ N	50 m	Pringal, Jhelum Village
12	74° 10′ 26.288″ E	34° 8′ 36.733″ N	1500 m	Upalhakmarg, Forest Area
13	74° 9′ 4.215″ E	34° 9′ 29.800″ N	1500 m	Tawarian Forest Area
14	74° 8′ 12.285″ E	34° 10′ 47.517″ N	1500 m	Forest Area
15	74° 7′ 22.080″ E	34° 11′ 35.330″ N	5000 m	Forest Area, Ishmabad Nala
16	74° 7′ 10.332″ E	34° 10′ 57.357″ N	3000 m	Bagna Nala, Forest Area
17	74° 7′ 30.230″ E	34° 10′ 8.319″ N	3000 m	Village, Islambad, Bagna & Forest Area
18	74° 7′ 39.132″ E	34° 9′ 15.311″ N	500 m	Bagna Nar
19	74° 6′ 10.275″ E	34° 8′ 32.096″ N	50 m	Forest Area
20	74° 4′ 58.183″ E	34° 9′ 11.289″ N	50 m	Forest Area
21	74° 3′ 4.736″ E	34° 9′ 27.929″ N	50 m	Forest Area
22	74° 2′ 34.129″ E	34° 9′ 43.573″ N	50m	Forest Area
23	74° 2′ 17.347″ E	34° 10′ 5.887″ N	50 m	Forest Area
24	74° 1′ 11.906″ E	34° 10′ 39.053″ N	50 m	Forest Area
25	74° 0′ 16.650″ E	34° 11′ 21.498″ N	50 m	Forest Area
26	73° 59′ 52.862″ E	34° 11′ 38.957″ N	50 m	Forest Area
29	74° 0′ 9.615″ E	34° 13′ 8.461″ N	50 m	Forest Area
30	74° 0′ 47.853″ E	34° 13′ 19.283″ N	50 m	Forest Area
33	74° 1′ 43.414″ E	34° 14′ 1.310″ N	50 m	Forest Area
37	74° 3′ 42.507″ E	34° 15′ 47.506″ N	50 m	Forest Area, co 31/rfd
27	73° 59′ 47.024″ E	34° 12′ 35.036″ N	50 m	Forest Area
28	74° 0′ 0.110″ E	34° 12′ 54.794″ N	50 m	Forest Area
29	74° 0′ 22.943″ E	34° 13′ 20.318″ N	50 m	Forest Area
31	74° 1′ 1.870″ E	34° 13′ 23.833″ N	50 m	Forest Area
32	74° 1′ 31.712″ E	34° 13′ 45.728″ N	50m	Forest Area
34	74° 1′ 20.600″ E	34° 14′ 21.236″ N	50 m	Forest Area, sidh kanu shah
34	74° 1′ 28.929″ E	34° 14′ 44.601″ N	50 m	Forest Area
35	74° 2′ 19.213″ E	34° 15′ 34.140″ N	50 m	Forest Area, co 31/rfd
38	74° 4′ 3.486″ E	34° 15′ 50.648″ N		Forest Area, open scrub
39	74° 4′ 39.748″ E	34° 15′ 19.869″ N	50 m	Forest Area, co 26/rfd
40	74° 5′ 17.733″ E	34° 15′ 21.806″ N	50 m	Forest Area, open scrub

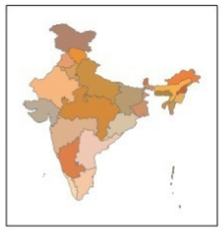
ANNEXURE -II A

LOCATION MAPS OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARYALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATIONS

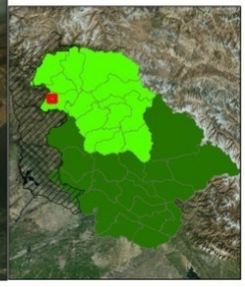


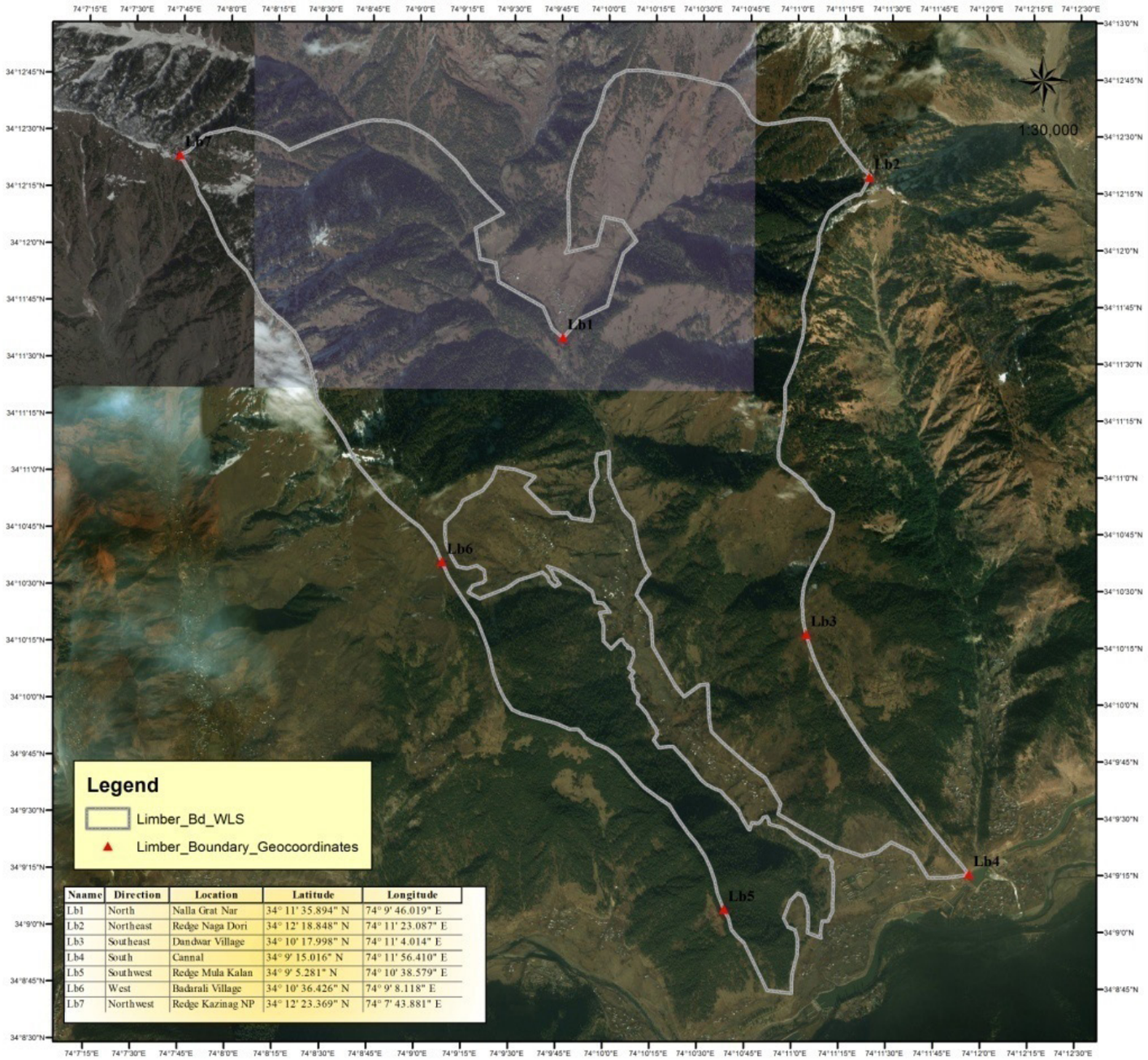


Name	Direction	Location	Latitude	Longitude
Lh1	North	Nalla Lachhawar	34° 12' 12.548" N	74° 4' 10.768" E
Lh4	Southeast	Bagna Nalla	34° 9' 24.652" N	74° 7' 15.305" E
Lh2	Northeast	Redge	34° 11' 45.031" N	74° 6' 10.188" E
Lh5	South	Redge and Nalla Rehwari	34° 8' 32.672" N	74° 6' 48.090" E
Lh6	Southwest	Road Balistan	34° 8' 36.887" N	74° 5' 33.443" E
Lh 7	South	Road Mulnag Mari	34° 9' 14.484" N	74° 3' 42.037" E
Lh8	Northwest	Redge	34° 10' 40.457" N	74° 1' 13.442" E
Lh3	Northeast	Kopra Redge	34° 10' 42.003" N	74° 6' 8.019" E

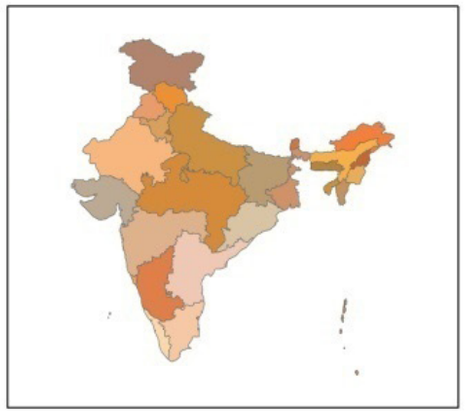


Map of
Lachipora Wildlife Sanctuary





Naame	Direction	Location	Latitude	Longitude
Lb1	North	Nalla Grat Nar	34° 11' 35.894" N	74° 9' 46.019" E
Lb2	Northeast	Redge Naga Dori	34° 12' 18.848" N	74° 11' 23.087" E
Lb3	Southeast	Dandwar Village	34° 10' 17.998" N	74° 11' 4.014" E
Lb4	South	Cannal	34° 9' 15.016" N	74° 11' 56.410" E
Lb5	Southwest	Redge Mula Kalan	34° 9' 5.281" N	74° 10' 38.579" E
Lb6	West	Badarali Village	34° 10' 36.426" N	74° 9' 8.118" E
Lb7	Northwest	Redge Kazinag NP	34° 12' 23.369" N	74° 7' 43.881" E

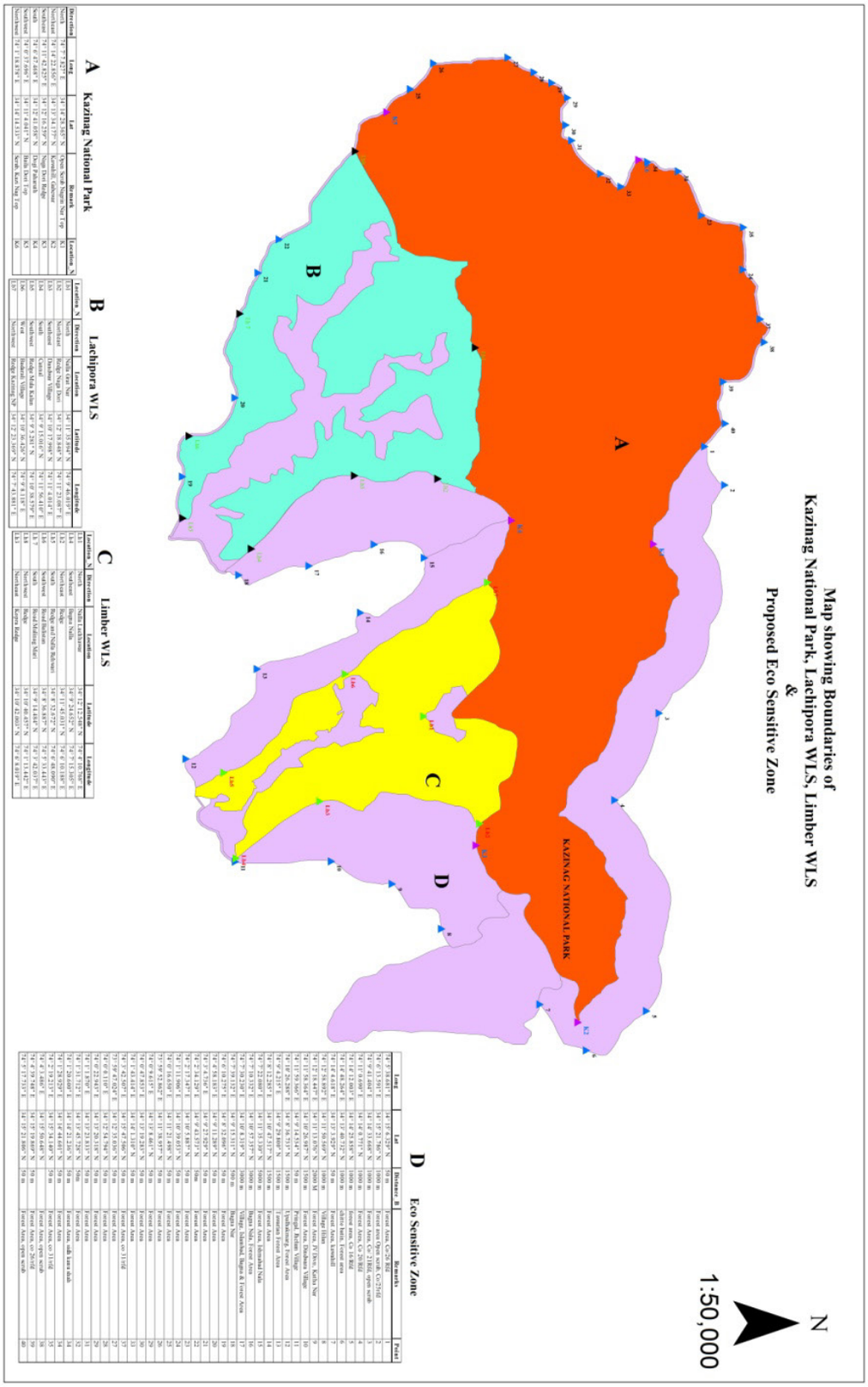


Map of
Lamber Wildlife Sanctuary



ANNEXURE -II B

MAP SHOWING BOUNDARIES OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATION



A Kazinag National Park

Direction	Long	Lat	Remark	Location No
South	74° 7' 0.625" E	34° 14' 25.345" N	Open Scrub Nagin Nar Top	K1
Northeast	74° 14' 23.150" E	34° 15' 14.176" N	Kemadli, Gulsoner	K2
Southeast	74° 13' 4.455" E	34° 12' 23.856" N	Nagin Nar Bridge	K3
Southeast	74° 13' 4.455" E	34° 12' 23.856" N	Nagin Nar Bridge	K4
Southwest	74° 6' 37.690" E	34° 13' 4.941" N	Bhala Nar Top	K5
Northeast	74° 7' 14.478" E	34° 14' 13.131" N	South Kazi Nag Top	K6

B Lachipora WLS

Location No	Direction	Location	Latitude	Longitude
L1	North	Nala Gazi Nar	34° 11' 15.834" N	74° 7' 43.810" E
L2	Northeast	Dandore Village	34° 10' 17.040" N	74° 7' 2.012" E
L3	Southeast	Dandore Village	34° 10' 17.040" N	74° 7' 2.012" E
L4	South	Chattad	34° 9' 13.01.0" N	74° 7' 56.110" E
L5	Southeast	Bridge Malik Kalan	34° 9' 3.267" N	74° 7' 49.376" E
L6	Northeast	Bridge Kanzing Chk	34° 12' 25.310" N	74° 7' 43.881" E

C Limber WLS

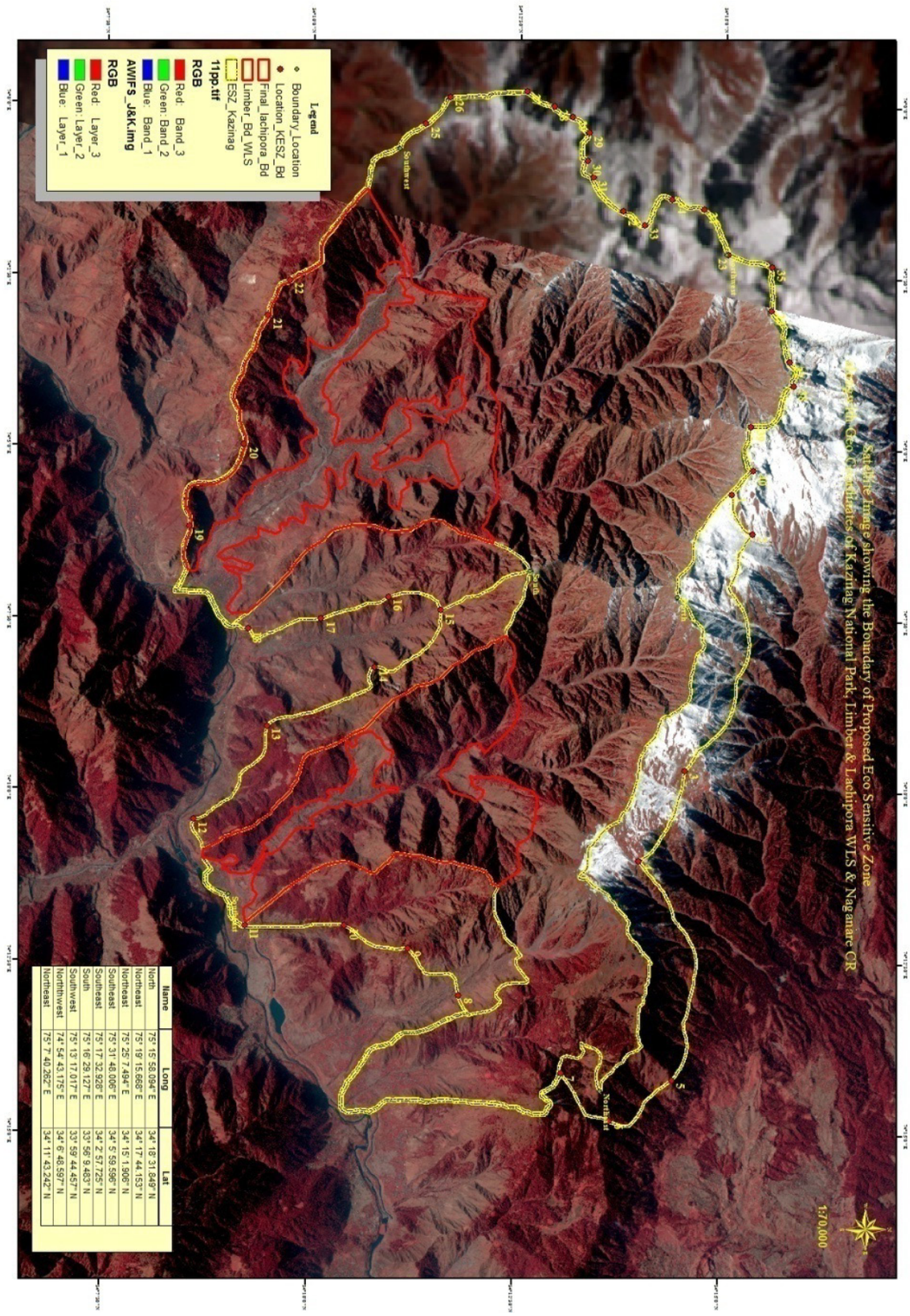
Location No	Direction	Location	Latitude	Longitude
L11	North	Nala Lachipur	34° 8' 13.126" N	74° 8' 11.165" E
L12	Northeast	Bridge	34° 11' 43.031" N	74° 6' 10.185" E
L13	Southeast	Bridge and Nalla Richwari	34° 8' 32.672" N	74° 6' 48.099" E
L14	Southeast	Road Diskoon	34° 8' 54.447" N	74° 7' 23.431" E
L15	Southeast	Road Mahiang Nala	34° 8' 54.447" N	74° 7' 23.431" E
L16	Northeast	Bridge	34° 10' 49.455" N	74° 6' 13.442" E
L17	Northeast	Karpra Bridge	34° 10' 42.092" N	74° 6' 8.810" E

D Eco Sensitive Zone

Long	Lat	Distance, ft	Remarks	Point
74° 8' 18.681" E	34° 15' 8.529" N	50 m	Forest Area, Co-2(Rd)	1
74° 8' 15.501" E	34° 15' 21.780" N	1000 m	Forest area Open scrub, Co-2(Rd)	2
74° 7' 11.610" E	34° 14' 48.930" N	1000 m	Forest Area, Co-2(Rd) - open scrub	3
74° 7' 11.610" E	34° 14' 48.930" N	1000 m	Forest Area, Co-2(Rd)	4
74° 8' 12.000" E	34° 14' 25.248" N	1000 m	forest area, Co-2(Rd)	5
74° 8' 44.264" E	34° 13' 40.332" N	1000 m	district limits, Forest area	6
74° 8' 54.600" E	34° 13' 56.160" N	1000 m	Village Hillan, Sawadli	8
74° 12' 18.444" E	34° 11' 13.026" N	2000 M	Forest Area, Fr Devis, Kalla Nar	9
74° 11' 58.164" E	34° 10' 26.947" N	1500 m	Forest Area, Dachoora Village	10
74° 10' 26.346" E	34° 9' 43.335" N	1500 m	Forest Area	11
74° 9' 23.328" E	34° 9' 29.880" N	1500 m	Forest Area	12
74° 8' 12.288" E	34° 10' 47.247" N	1500 m	Forest Area	13
74° 7' 52.920" E	34° 10' 57.156" N	1000 m	Forest Area, Sonwadi Nala	14
74° 7' 39.240" E	34° 10' 8.520" N	1000 m	Village, Ishmikal, Bagra & Forest Area	15
74° 7' 39.132" E	34° 9' 15.312" N	500 m	Bagra Nar	16
74° 7' 0.216" E	34° 8' 32.496" N	50 m	Forest Area	17
74° 6' 54.336" E	34° 8' 23.628" N	50 m	Forest Area	18
74° 6' 54.336" E	34° 9' 23.628" N	50 m	Forest Area	19
74° 6' 54.336" E	34° 10' 23.580" N	50 m	Forest Area	20
74° 7' 17.364" E	34° 10' 5.868" N	50 m	Forest Area	21
74° 7' 34.128" E	34° 9' 43.332" N	50m	Forest Area	22
74° 8' 0.636" E	34° 11' 21.696" N	50 m	Forest Area	23
74° 7' 59.52.862" E	34° 11' 38.937" N	50 m	Forest Area	24
74° 8' 0.648" E	34° 11' 8.467" N	50 m	Forest Area	25
74° 7' 42.240" E	34° 10' 47.580" N	50 m	Forest Area, co 11/rd	27
74° 7' 59.47.624" E	34° 12' 25.636" N	50 m	Forest Area	28
74° 8' 0.648" E	34° 11' 48.144" N	50 m	Forest Area	29
74° 8' 0.216" E	34° 12' 25.116" N	50 m	Forest Area	30
74° 8' 1.512" E	34° 12' 45.324" N	50m	Forest Area	31
74° 8' 1.296" E	34° 13' 23.832" N	50 m	Forest Area	32
74° 8' 1.944" E	34° 14' 44.460" N	50 m	Forest Area, Nala Sara Gali	33
74° 8' 1.080" E	34° 14' 24.012" N	50 m	Forest Area, co 11/rd	34
74° 7' 59.34.480" E	34° 13' 54.480" N	50 m	Forest Area, co 11/rd	35
74° 8' 1.080" E	34° 13' 35.640" N	50 m	Forest Area, open scrub	36
74° 8' 1.512" E	34° 13' 15.660" N	50 m	Forest Area, co 26/rd	37
74° 8' 1.512" E	34° 12' 55.680" N	50 m	Forest Area, open scrub	40

ANNEXURE -II C

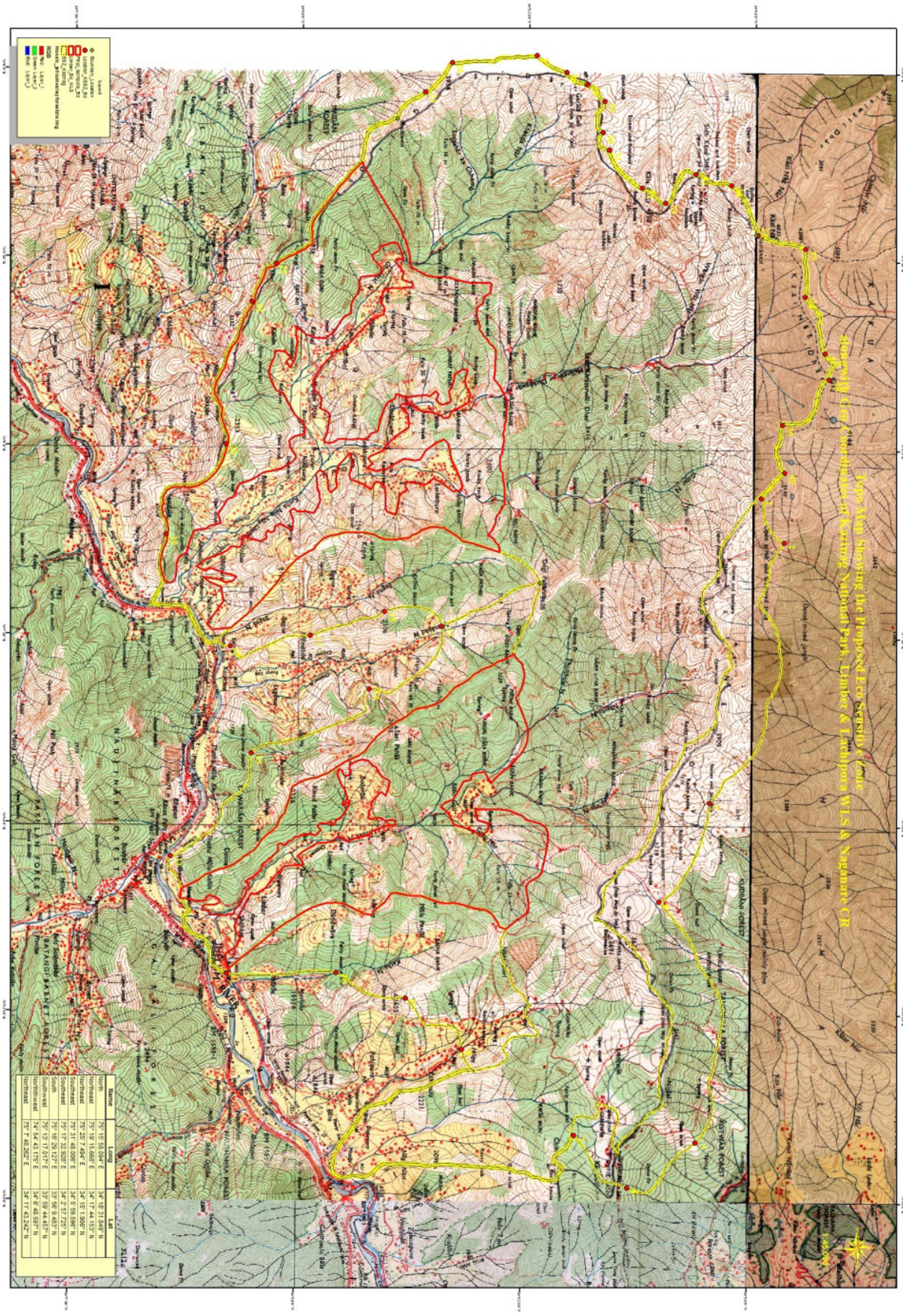
SATELLITE MAP OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATION



Name	Long	Lat
North	75° 15' 58.094" E	34° 18' 31.849" N
Northeast	75° 19' 15.668" E	34° 17' 44.153" N
Northeast	75° 25' 7.494" E	34° 15' 1.906" N
Southeast	75° 31' 48.006" E	34° 5' 59.596" N
Southeast	75° 17' 32.928" E	34° 2' 57.725" N
South	75° 16' 29.127" E	33° 56' 9.483" N
Southwest	75° 13' 17.017" E	33° 59' 44.457" N
Northwest	74° 54' 43.175" E	34° 6' 48.597" N
Northeast	75° 7' 40.262" E	34° 11' 43.242" N

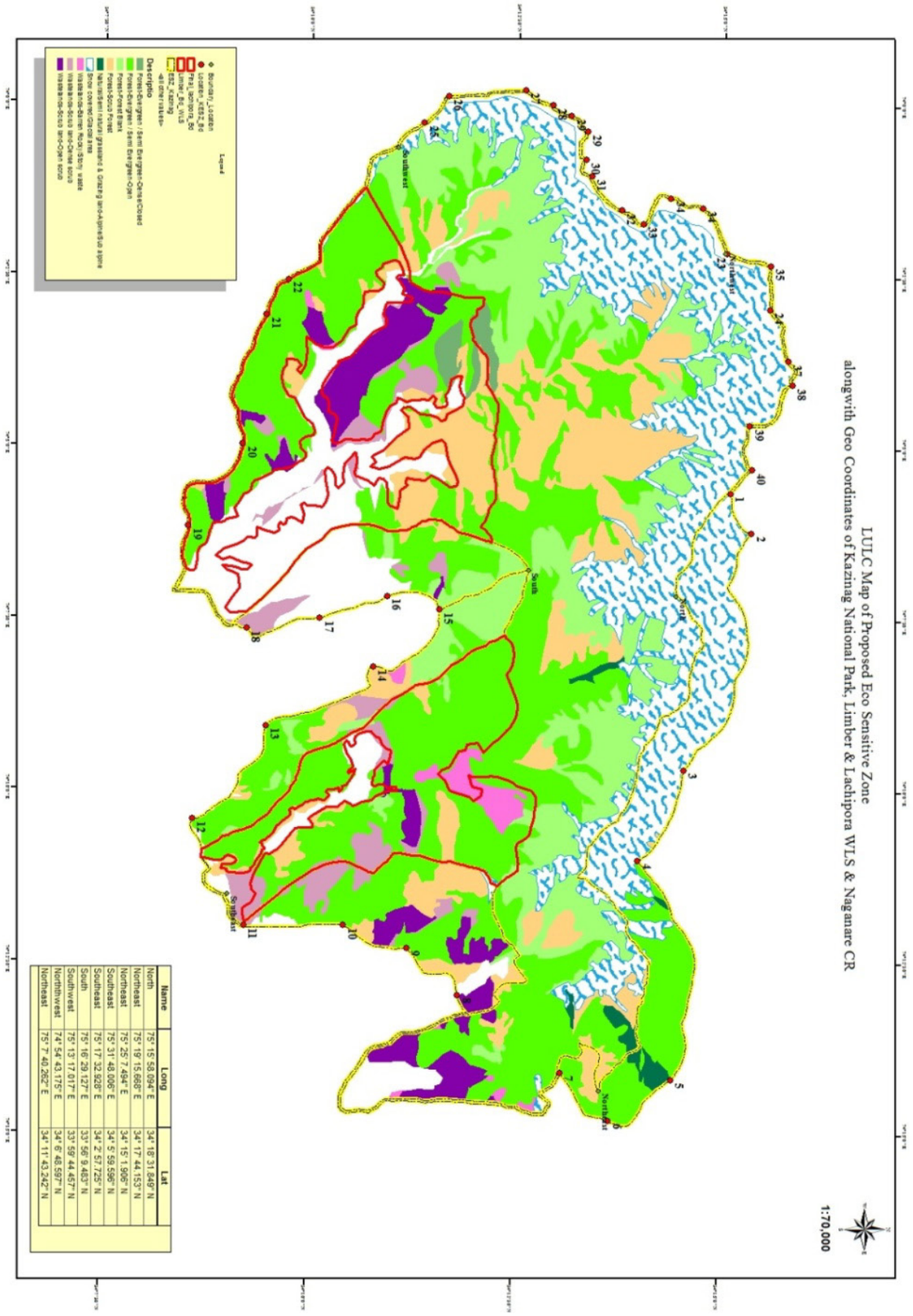
ANNEXURE -II D

MAP OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATION



ANNEXURE -II E

LAND USE LAND COVER MAP OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY



ANNEXURE -III

A. TABLE SHOWING THE GEO-COORDINATE OF THE PROTECTED AREA OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY

Kazinag National Park				
Name	Direction	Location	Latitude	Longitude
K1	North	Open Scrub Nagrin Nar Top	34⁰ 14′ 28.365″ N	74⁰ 7′ 7.827″ E
K2	North-East	Kawa hill, Gabewar	34⁰ 13′ 34.177″ N	74⁰ 14′ 22.856″ E
K3	South-East	Naga Dori Redge	34⁰ 12′ 16.259″ N	74⁰ 11′ 42.825″ E
K4	South	Dogi Paharuth	34⁰ 12′ 41.058″ N	74⁰ 6′ 47.468″ E
K5	South-West	Baila Dori Top	34⁰ 11′ 4.041″ N	74⁰ 0′ 37.696″ E
K6	North-West	Scrub, Kazi Nag Top	34⁰ 14′ 14.533″ N	74⁰ 1′ 18.878″ E
Lachipora Wildlife Sanctuary				
Name	Direction	Location	Latitude	Longitude
Lh1	North	Nalla Lachhawar	34⁰ 12′ 12.548″ N	74⁰ 4′ 10.768″ E
Lh4	South-East	Bagna Nalla	34⁰ 9′ 24.652″ N	74⁰ 7′ 15.305″ E
Lh2	North-East	Redge	34⁰ 11′ 45.031″ N	74⁰ 6′ 10.188″ E
Lh5	South	Redge and Nalla Rehwari	34⁰ 8′ 32.672″ N	74⁰ 6′ 48.090″ E
Lh6	South-West	Road Balistan	34⁰ 8′ 36.887″ N	74⁰ 5′ 33.443″ E
Lh7	South	Road Mulinag Mari	34⁰ 9′ 14.484″ N	74⁰ 3′ 42.037″ E
Lh8	North-West	Redge	34⁰ 10′ 40.457″ N	74⁰ 1′ 13.442″ E
Lh3	North-East	Kopra Redge	34⁰ 10′ 42.003″ N	74⁰ 6′ 8.019″ E
Limber Wildlife Sanctuary				
Name	Direction	Location	Latitude	Longitude
Lb1	North	Nall Grat Nar	34⁰ 11′ 35.894″ N	74⁰ 9′ 46.019″ E
Lb2	North-East	Redge Naga Dori	34⁰ 12′ 18.848″ N	74⁰ 11′ 23.087″ E
Lb3	South-East	Dandwar Village	34⁰ 10′ 17.998″ N	74⁰ 11′ 4.014″ E
Lb4	South	Cannal	34⁰ 9′ 15.016″ N	74⁰ 11′ 56.410″ E
Lb5	South-West	Rege Mula Kalan	34⁰ 9′ 5.281″ N	74⁰ 10′ 38.579″ E
Lb6	West	Badarali Village	34⁰ 10′ 36.426″ N	74⁰ 9′ 8.118″ E
Lb7	North-West	Redge Kazinag NP	34⁰ 12′ 23.369″ N	74⁰ 7′ 43.881″ E

B. TABLE SHOWING THE GEO-COORDINATES OF THE ESZ BOUNDARIES OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY

Direction	**Boundary Description**	**Latitude(N)**	**Longitude (E)**
North	Kudbani Forest area	34° 14′ 33.668″N	74° 9′ 41.404″E
North-East	Chitte Batin Forest area	34° 13′ 40.732″N	74° 14′ 48.264″E
East	Gabbewar area	34° 13′ 1 3.929″N	74° 14′ 4.618″E
South-East	Katha Nallah area	34⁰ 10′ 26.987″N	74⁰ 11′ 58.364″E
South	Thathla Mula area	34 ⁰ 8′ 36.733″N	74⁰ 10′ 26.288″E
South-West	Loipahatka Chhamb area	34⁰ 11′ 21.498″N	74⁰ 0′ 16.650″E
West	Garaja Gali area	34 ⁰ 13′ 8.461″N	74 ⁰ 0′ 9.615″E
North-West	Kazinag area	34⁰ 15′ 34.140″N	74⁰ 2′ 19.213″E

ANNEXURE -IV

LIST OF VILLAGE FALLING UNDER ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH GEO-COORDINATES

The following eighteen villages / townships fall within the proposed ESZ of Kazinag National park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary:

S.No.	Village	Tehsil	District	Latitude	Longitude
1.	Bagna	Boniyar	Baramulla	34°10′29.171″N	74° 6′43.904″E
2.	Kopra	Boniyar	Baramulla	34°10′43.999″N	74° 6′13.486″E
3.	Kath Beikh	Boniyar	Baramulla	34°1′15.935″N	74° 6′39.197″E
4.	Naga Pathri	Boniyar	Baramulla	34°12′ 2.669″N	74° 6′30.519″E
5.	Islamabad	Boniyar	Baramulla	34°10′ 2.536″N	74° 7′21.262″E
6.	Bujanthal	Boniyar	Baramulla	34° 9′ 47.050″N	74° 9′ 7.755″E
7.	Nalla	Boniyar	Baramulla	34° 9′ 35.054″N	74° 10′2.232″E
8.	Upalhakimarg	Boniyar	Baramulla	34° 8′ 41.100″N	74°10′39.331″E
9.	Naugiran	Boniyar	Baramulla	34° 8′ 50.221″N	74° 11′ 7.345″E
10.	Dandwara	Boniyar	Baramulla	34°10′30.316″N	74°11′11.034″E
11	Piharan	Boniyar	Baramulla	34° 9′ 45.737″N	74°11′57.188″E
12.	Kaha Bahak	Boniyar	Baramulla	34°11′29.712″N	74°11′30.105″E
13.	Hillan	Boniyar	Baramulla	34°11′58.575″N	74°12′49.433″E
12.	Bugna	Boniyar	Baramulla	34° 9′ 47.460″N	74° 7′ 17.499″E
13.	That Mulla Khan	Boniyar	Baramulla	34° 9′ 5.449″N	74° 10′ 9.346″E
14.	Gabbewar	Boniyar	Baramulla	34°13′26.507″N	74°13′55.534″E
15.	Chitte Batin	Boniyar	Baramulla	34°13′27.679″N	74°14′29.857″E
16.	Tund Bahk	Boniyar	Baramulla	34°14′32.527″N	74°13′25.312″E
17.	Pahlipora	Boniyar	Baramulla	34°14′35.803″N	74°13′16.337″E
18.	Katha	Boniyar	Baramulla	34°10′47.679″N	74° 12′ 2.444″E

ANNEXURE -V

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.

[F. No. 25/14/2020-ESZ]

(Dr. Satish C. Garkoti)
Scientist 'G'

Annexure 1. Critical sites for markhor in Kazinag National Park				
Drainage	**Critical Sites**			
	June-August	**September-November**	**December-March**	**May-June**
Goretal	Kotharan and Harawpal gali			Kotharan and Harowpal gali
Malangan	Kala pahad, Churasi, checkadori, Meem ka nalla, Burzi wala pada, gunda wala nala, Laat ki kadam	SP nalla Anadab top, S.P. nalla, gunda wala nala, Burzi wala nala,	Anadab, Gorkhon silla, Kandora walla, Harowpall, Balapud, Malash, Kunjnard, Naddi, Noorzudon and Balapud, Kunjnad, Koot, Zab, Barthian bahak, Koot, Jalla ka nakka, Daire, Jalla Bandari ka pud (newly occupied areas in winter)	Malash, Makhden, Annadab, Pajjay da pud, Nadi, Kunjnad, Koot, Khandipajja
Gujjar	Lainadori, Vozal pud, Kotherkuthan, kothe dong, sabai nadij top, Churword colour, Nijifresh dabur, Iddanad Thiki	Beli nave, Beli bahak, gulki bal, bannji, jallamari mathe, Koterkuthan, Keekar gali	Shidi, charakh, Mouchan gund, Jallamari mathe,Beli nave, Beli bahak, Shidi and Nagapathri, Footovwol gund, Charakh pud	Gode zeen, Akbar khanun gatte, Fancdi, Vozul pud, Burzakote, colour, churword
Thulthulan	Loren gali, Sahab sunz kadam, Keekar gali,	Thulthulan van	Hokhyan	
Nagrin			Wanten pud, Kothnale	
Gamalitter	Abenad, Kothnale, Burzakote	Abenad, Kothnale	Kumdinad	
Viji/Methwani	Maven nad, Shravene nalle, Methwan bahak, Lachidona top,	Maven nad, Methwan bahak, Shatlu	Rambra, Mamyakadam ridge, Safed fresh pud and Shravene nalle, Hooble, Kadomwol, Gir chatka, Lachidona, Shatlu,	Rambra, Mamyakadam ridge, Safed fresh pud and Shravene nalle, Hooble, Kadomwol, Gir chatka and Lachidona
Hillon	Kuchkard, Hedebal	Kuchkard		

Appendix Vi

Human-Wildlife Conflict data of Baramulla district (till 08/2021)

S.No	NAME	AGE	ADDRESS	DATE OF INCIDENT	SPECIES INVOLVE	EXTENT OF INJURY
1.	Haleema Band	40	Naganari	May/2001	Black Bear	Death
2.	Hajra	40	Naganri	11/4/2001	Black Bear	Death
3.	Adilah Tantry	10	Naganari	11/01/2003	Leopard	Death
4.	Shahmali Begum W/O Ab Jabar Sheikh		Mayan Lachipora Co.08 Lachipora Baramulla	30-01-2011	Leopard	Death
5.	Mst Saleema	35	Limber	07/04/1997	Leopard	Injury
6.	Ab Rashid	14	Baba Gal Limber	Sep/2005	Black Bear	Injury
7.	Mahtaba Bano	45	Budrali Limber	April/2005	Black Bear	Injury
8.	Mohd Hussain Khan	70	Budrali Limber	Aug/1985	Black Bear	Injury
9.	Suna ullah Dar	35	Budrali Limber	06/10/2004	Black Bear	Injury
10.	Mohd Sharif Khan	42	Bimyar	9/10/2006	Black Bear	Injury
11.	Hilal Ahanger	17	Bimyar	14/08/2002	Black Bear	Injury
12.	Hari Chand	70	Bimyar	31-08-2003	Black Bear	Injury

13.	Nawab Khan	62	Zainpora	6/2/2002	Black Baer	Injury
14.	Mohmmed Qasim Banday S/o Ab.Aziz		Ajara Co.5b Naganaree Baramulla	03-08-2007	Bear	Injury
15.	Bashir Ahmad Mir S/o Dilawar Mir	-	-do-	03-08-2007	Bear	Injury
16.	Ab.Ghani Banday S/O Gh.Qadir Banday	-	-do-	03-08-2007	Bear	Injury
17.	Zoona Begum W/o Mohd. Maqbool Dar	-	Co.1 Lachipora Baramulla	03.10.2007	Leopard	Injury
18.	Wali Mohd. Khatana S/o Noor Mohd.	-	Hellan Pehlipora Co.5 Naganaree Baramulla	07.10.2007	Bear	Injury
19.	Sumiya Bano D/o Gh. Mohd. Magray	-	Khulana Co.5 b Limber Baramulla	13.09.2008	Leopard	Injury
20.	Bashir ahmad Chheechi S/O Syed Ali	-	Bemiyar Co.5b Limber Baramulla	22-02-2009	Leopard	Injury
21.	Ab. Majeed War S/O Ab. Raheem War	-	Nowgrain Pringal Limber Baramulla	15-06-2015	Black Bear	Injury
22.	Saja Beagum W/O Ghulam Mohiudin Bhat	-	Pahlipora Boniyar Naganari CR	29-07-2015	Black Bear	Injury
23.	Mohd Maqbool Lone S/O Ali Mohd Lone	-	Bodrali Limber	03-08-2015	Black Bear	Injury
24.	M. Shareef Khan S/O Hassan Ali Khan	-	Hakhpathri Boniyar Naganari CR	25-08-2015	Leopard	Injury
25.	Shareef a Jan W/O m .shareef Khan	-	Hakhpathri Boniyar Naganari CR	25-08-2015	Leopard	Injury
26.	Mohd Ibraheem Khan S/O Shair Ali Khan	-	Pehlipora Hakpathri Naganari CR	22-09-2017	Black Bear	Injury
27.	Zuhaib Ah Lone S/O: Sajad Ahmad Lone	-	Zehanpora Boniyar Naganari CR	16-07-2021	Monkeys	Injury

(I) i. Restoration of Habitat: Weed Control, Initial Operation

Sr. 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.

(I) ii. 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

(I) iii. 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.
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.

(I) iv. Restoration of Habitat: Planting, Sowing – Initial Operation

Sr. 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: By compartments, or landmarks and describe the site factors e.g. vegetation cover, soil, perturbations etc.
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.

(I) v. 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.

(I) vi. Restoration of Habitat: Area under Protection/Closure

Sr. 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.

(II) i. Animals: Measuring Trends in Populations (Year)

Sr. 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.
ndices of density or dung count details to be recorded here.

(II) ii. Animals: New Records

Sr. 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.

(II) iii. Animals: Mortality other than that Attributable to an Offence

Sr. 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 postmortem results), old age, cause difficult to determine, predation etc.
Remarks: Any other useful information.

(II) iv. Animals: Mortality Attributed to Poaching or an act of Vandalism

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

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.

(II) v. 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, 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.

(II) vi. Animals: Killing of a Human by Wildlife or Injury caused

Sr. 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 comptt 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.

(II) vii. Animals: Wildlife Damage to Private or Public Property

Sr. 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.

(III) i. Plants: New Records

Sr. 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.

(III) ii. Plants: Disease And Mortality

Sr. 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.

(III) iii. Plants: Illegal And Legal Collection

Sr. 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.

(IV) Grazing Of Domestic Livestock

Sr. 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.

(V) i. Inter-Agency Programs: Agencies and Schemes

Sr. 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.

(V) ii. Programs of NGOs

Sr. 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.

(VI) i. Construction*/Maintenance* Of Infrastructure: Roads & Bridges

Sr. 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.

(VI) ii. Construction*/Maintenance* Of Infrastructure: Buildings

Sr. no	Range	Nature of the building	Location	Type of construction	Numbers	Total cost	Status
1	2	3	4	5	6	7	8

Note: Nature of the building: e.g. residential, office, store, chauki, watch tower, tourist facility, hide, barrier, patrolling camp (temporary or permanent) etc.
Location: By compartment or village or landmark as appropriate.
Type of construction: Masonry (brick/stone), log or wooden, metal, local material etc.
Status: Completed or ongoing.
*: Strike out which is not applicable. Use separate forms as required; for construction and for maintenance details.

(VI) iii. Development*/Maintenance* Of Infrastructure: Communication

Sr. no	Range	Type of facility	Location	Number	Cost	Advantage gained	Remarks
1	2	3	4	5	6	7	8

Note:

Type of facility: e.g. telephone, wireless.
Location: Staff Hq location, village, landmark etc.
Advantage gained: Area served, staff locations connected etc.
Remarks: Record status - complete, ongoing, functional, non-functional.
*: Strike out that is not applicable. Use separate forms as required, for new facility and maintenance.

(VI) iv. Development*/Maintenance* Of Infrastructure: Vehicles

Sr. no	Kind of vehicle	Number	HQ if any	Intended use	Cost	Remarks
1	2	3	4	5	6	7

Note:
Kind of vehicle: Jeep, trailer, tractor, truck, minibus, tanker, motorcycle, bicycle, boat (paddle or motor), launch, car, riding elephant, ponies, etc.
Intended use: Management support, patrolling/antipoaching, tourism etc.
Remarks: Any other useful information. Mention written off vehicles, retired or dead animals.
*: Strike out the inapplicable. Use separate forms as required to indicate acquisition, maintenance.

(VI) v. Development of Infrastructure: Manpower Recruitment*/Existing Manpower*

Sr. no	Category of post	Number	Status		Scale of pay	Intended deployment/deployed as	Remarks
			Recruited	Vacant			
1	2	3	4	5	6	7	8

Note:
Status: Permanent, temporary, contractual.
Intended deployment: State purpose e.g. conservation education, research, antipoaching, etc as applicable.
Remarks: Any other useful information. New recruits within the year should be mentioned. This will also include officers & staff obtained on transfer/ deputation. Likewise changes due to personnel going out on transfer, deputation, retirement, removal, resignation, death should be reflected in this column.
*: Strike off that which is not applicable. Accordingly, use additional forms. One for recruitment and one for the existing manpower.

(VI) vi. Developing Infrastructure: Construction of Boundaries, Fences, Cpts, Epts, Exclosures, Enclosures

Sr. no	Category of construc-tion	Range	Location	Length (meters)	Number	Specifications	Remarks
1	2	3	4	5	6	7	8

Note:

Category: Kind of boundary e.g. comptt, block, zone etc. In case of fences: power fence, others.
Location: By compartment or suitable landmark.
Numbers: In case of exclosures, enclosures, number of pillars etc. as applicable.
Specifications: As applicable to the construction: dry rubble, chain link, local material, height, area, depth, width etc.
Remarks: Any other relevant information.
*: Strike out that is inapplicable. Use a form each for maintenance of existing features and for new features.

(VII) i. Tourism: Visitors

Total number of visitors all categories:
Name of complex:
Total revenue earned:

Sr. no	The category of visitors by month & number					Indian			No. day visitors	No. staying overnight and revenue
	Adult			Children	Foreigner	Rural	Urban	Revenue		
	Month	Male	Female							
1	2	3	4	5	6	7	8	9	10	11

Note: Columns 2 to 5 will be written in three successive lines for the month pertinent, one below the other. First line information pertains to foreign tourists. Put a tick (✔) in col. 6. Second and third line details rural and urban tourists respectively. Put a tick (✔) in Col. 7, Column 8 as applicable.

(VII) ii. Tourism: Use of Tourist Facilities – Lodging

Name of complex:
Class of accommodation:
Capacity (beds):

Sr. no	Month	Month capacity	Occupancy (beds/month)		Total occupancy during the month (beds/month)
			Foreign	Indian	
1	2	3	4	5	6

Note: Class of: Classify accommodation as per tariff slabs and if applicable, might include different rate
Accommodation structure for the same set viz. for Indians and foreign tourists. The highest class for example will be I for AC rooms, IV for tents etc. Use a fresh form for each class of accommodation.
Month Capacity: Number of days in a month x total number of beds available in that class per night halt.

(VII) iii. Eco-Tourism - Partners

Sr. no	Identify of Eco tourism entrepreneur	Infrastructures	Programs	Investment	Kind and extent of benefits to local people	Benefit to PA & resources
1	2	3	4	5	6	7

(VII) iv. Eco-Tourism: Visitor Aspirations

Visitor category	Number	Interested in									
Adults Male Female Children Foreigners Male Female Children		Plants	Bird watch-ing	Animal sighting	Photography	Sketching	Scenic place	Cultural/ His-torical sites	Pilgrim-age	Trekking	Others
1	2	3	4	5	6	7	8	9	10	11	12

Note :8.4 (A) is for urban population
8.4 (B) is for rural population
Create separate forms 8.4 (A) & 8.4 (B) that are otherwise identical

(VIII) Outbreak Of Fires

Sr. No	Range	Location	Extent (ha)	Dates		Reasons	Estimated loss	Remarks
				Detected	Controlled			
1	2	3	4	5		6	7	8

Note :

Location : By compartments

Reasons : Established or suspected

Estimated loss : e.g. number of trees damaged, stacked firewood/timber/bamboo destroyed/damaged by volume and cost, wild animals dead, particulars of sensitive 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.

(IX) Offence Cases Detected

Sr. No	Range	Category	Numbers	Number of cases decided		Number of cases under process	Number of cases compounded	Remarks
				Successful	Failure			
1	2	3	4	5	6	7	8	9

Note:
Category : e.g. illegal cutting of trees, illegal firewood, illegal NWP, poaching, encroachment, illegal cattle grazing etc. category should be odified by letters of alphabet.
Remarks : Any other useful information. This should also include the number of cases pending decision with the department.
*: The cases under column 8 pertain to area of non PA status under management which do not involve an endangered species (Schedule-I).

(X) Incentives and Rewards/Awards

Sr. No.	Range	Number of recipients: incentives/reward for detecting offences	No. of recipients award for outstanding service	Kind of award	Number of recipients	Remarks
1	2	3	4	5	6	7

Note:
Kind of award : e.g. a medal like the Shaurya Chakra, any other such awards instituted by the State or Central Government. Includes citations, extra increments etc.
Remarks : Any other useful information. If an award carries cash, mention the amount.

(XI) i. Research Projects under Implementation Through Pa Manpower With Or Without Collaboration With Other Agencies

Sr. No.	Title	Completed	Ongoing	New	Status	Financial outlay (Rs)	Expenditure incurred (Rs)	Remarks
1	2	3	4	5	6	7	8	9

Note:
Completed : State date of completion and the status of the project report.
Ongoing : State since when the project is under operation and expected period of completion.
New : State the date of commencement and duration.
Status : State the progress towards achievement of objectives; or project which has been dropped or held in abeyance etc.
Remarks : Any other relevant information. If the project is in collaboration with any other agency or is a contractual arrangement, state the situation and the name of the collaborating agency. If animal/plant specimens are being collected state authority and where the collections are being housed.

(XI) ii. Research Projects under Implementation By Other Agencies

Sr. No.	Title	Completed	Ongoing	New	Status	Financial outlay (Rs)	Expenditure incurred (Rs)	Remarks
1	2	3	4	5	6	7	8	9

Note: Completed : State date of completion and the status of the project report.
Ongoing : State since when the project is under operation and expected period of completion.
New : State the date of commencement and duration.
Status : State the progress towards achievement of objectives, or project which has been dropped or held in abeyance etc.
Remarks : Any other relevant information. State the name of the agency. If animal/plant species are being collected, state authority and where the collections are being housed.

(XII) Survey and Inventories

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

Note:
Completed: State date of completion of field work and the status of the report.
Ongoing: State since when is it under operation and when is it expected to be completed.
New: State the date of commencement and duration.
By PA personnel: Will include collaboration or contractual arrangement. State the case as relevant.
Other agency: State the name of the agency.
Remarks: If specimen of plants/animals are being collected, state where the collection is being housed and authority. Any other useful information.

(XIII) The Monitoring Programme

Sr. No.	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

Note:

Technique: e.g. PCQ, belt transect, line transect and plots, pugmarks etc. by the title of the technique.
Status of : Write only if applicable.

Collaboration

(XIV) i. Ecodevelopment Programme and Implementation Year

Sr. No	Nature of the programme	Sector (Central/State) or NGO sponsored	Target set		Achievement		Village (Buffer/ enclaved)	Remarks
			Physical	Financial	Physical	Financial		
1	2	3	4	5	6	7	8	9

Note:
Nature of the programme: e.g. pasture development, fodder plantations, establishing biogas units, livestock improvement, establishment and development of sericulture, revival of local skills such as handicraft, water harvesting systems, adults education etc.
Village: Site where programme is being implemented - whether buffer or inside PA.
Remarks: State problems, state failures and reasons 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.

(XV) Progress of All Strategies under the Zone and Theme Plans Year

Sr. No	Zone/Theme	Nature of strategy	Target as per schedule of operations/APO*		Achievement		Location	Remarks
			Physical	Financial	Physical	Financial		
1	2	3	4	5	6	7	8	9

Note:
Zone/Theme plan: Mention title.
Nature of strategy: e.g. demarcation of boundary, creation of artificial water source, salt lick, maintenance of water sources (desilting), cutting and burning of Fireline, prescribed burning, weed control, immunization of cattle, maintenance of nature trails, setting up wayside exhibits, recruitment of staff, number of villages translocated, settled on new sites etc.
Location: Where pertinent, mention location e.g. weed control in comptt. 105, 111, 117.
Remarks: State problems, failures and reasons thereof, shortfall and reason, deviations if any and reasons, non-implementation with reasons etc.
*APO: (Annual Plan of Operations). Under Col.4 & 5, each column will have two figures. First the figure as per the schedule of operations in the plan and next to it in the same column the figure as per APO. If they differ it amounts to a deviation.

(XVI) A Summary of Allotment of Funds, Revenue and Expenditure Year

Sr. No	Plan/non-plan/ any other grant	Sector Central/State/other	Allotment received		Expenditure Incurred		Revenue realised	Remarks
			Non-recurrent	Recurrent	Non-recurrent	Recurrent		
1	2	3	4	5	6	7	8	9

Note: Explain under expenditure, over expenditure, savings and surrenders. State the extent of demand for the year as per the schedule of operations/APO in the remark's column

(XVII) Connecting Multi-Agency Programs In Landscape Based Planning Partners During Year:

Sr. No.	District	Sector/Central/State/ Other (Specify)	Agency & Work area/speciality	Program coverage	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?

(XVIII) 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 In-vestment	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

Annexure-II

Government of Jammu and Kashmir
Civil Secretariat Forest Department

Notification.

Jammu, the 18 of December, 2007.

SRO 495 Whereas the area specified in Annexure to this Notification has adequate ecological, faunal, floral, geomorphological and natural significance of zoological association for the purpose of protecting, propagating and developing Wildlife and its environment.

Now therefore, in exercise of the powers conferred by sub-section (1) of section 35 of the Jammu and Kashmir Wildlife (Protection) Act, 1978, the Government hereby declare its intention to constitute the said areas as a National Park.

By order of the Government of Jammu and Kashmir

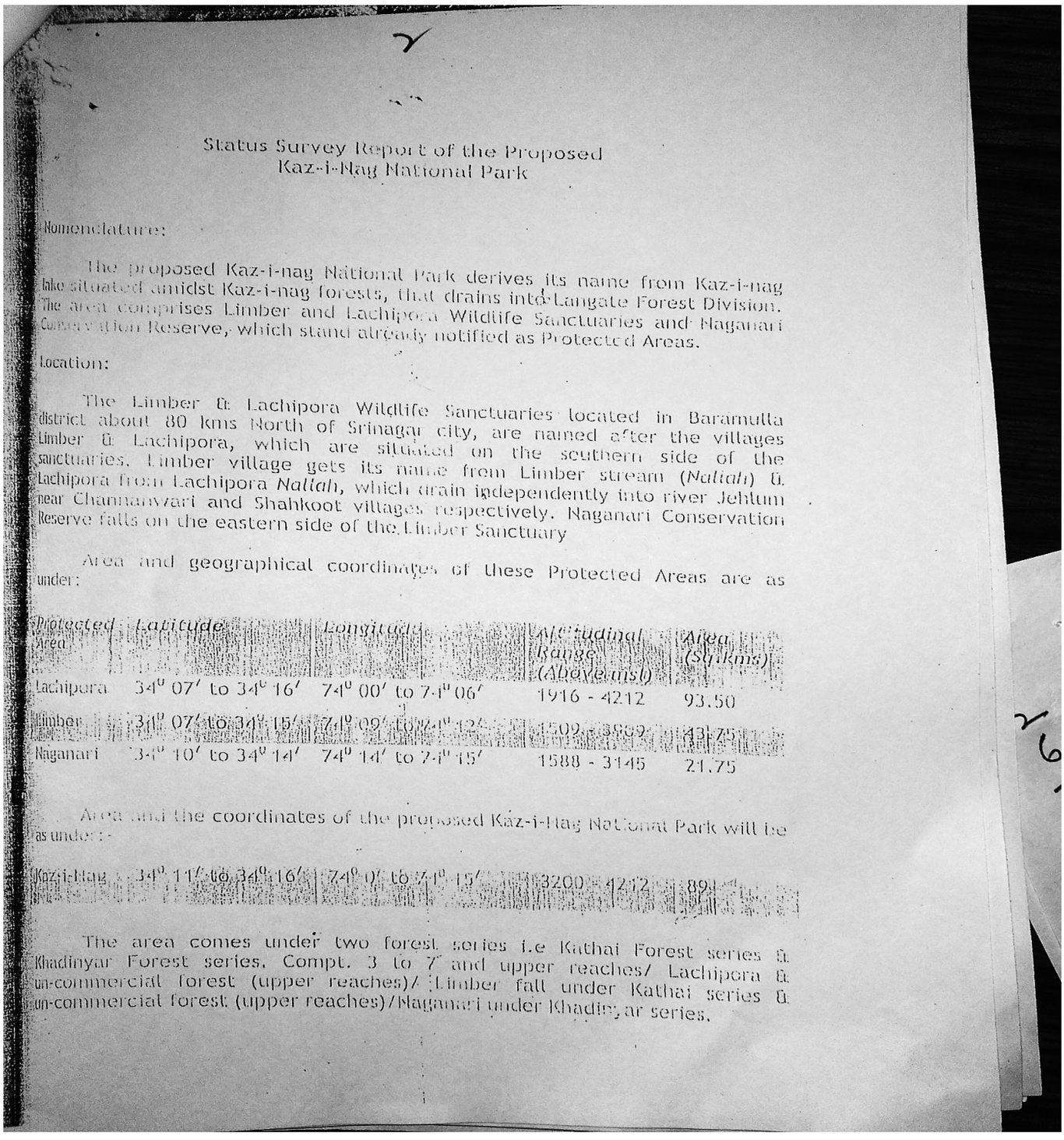
Sd/-
Commissioner /Secretary to Government,
Forest Department

No. FST/WL/71/2007 Dated: 18.12.2007

Copy to the:-

1. Principal Secretary to government, General Administration Department.
2. Commissioner/Secretary to Government Law Department (w.e.f.)
3. Pr. Chief Conservator of Forests.
4. Secretary to Government R&B Department.
5. Chief Engineer Mughal Road Jammu.
6. Chief Conservator of Forests Jammu/Srinagar
7. Government Press for publication of the SRO in next government gazette.

Under Secretary to Government
Forest Department



Status Survey Report of the Proposed Kaz-i-Nag National Park

Nomenclature:

The proposed Kaz-i-nag National Park derives its name from Kaz-i-nag lake situated amidst Kaz-i-nag forests, that drains into Langate Forest Division. The area comprises Limber and Lachipora Wildlife Sanctuaries and Naganari Conservation Reserve, which stand already notified as Protected Areas.

Location:

The Limber & Lachipora Wildlife Sanctuaries located in Baramulla district about 80 kms North of Srinagar city, are named after the villages Limber & Lachipora, which are situated on the southern side of the sanctuaries. Limber village gets its name from Limber stream (*Nallah*) & Lachipora from Lachipora *Nallah*, which drain independently into river Jehlum near Chanmanyari and Shahkoot villages respectively. Naganari Conservation Reserve falls on the eastern side of the Limber Sanctuary

Area and geographical coordinates of these Protected Areas are as under:

Protected Area	Latitude	Longitude	Altitudinal Range (Above ansl)	Area (Sq kms)
Lachipora	34° 07′ to 34° 16′	74° 00′ to 74° 06′	1916 - 4212	93.50
Limber	34° 07′ to 34° 15′	74° 09′ to 74° 12′	1509 - 3699	43.75
Naganari	34° 10′ to 34° 14′	74° 14′ to 74° 15′	1588 - 3145	21.75

Area and the coordinates of the proposed Kaz-i-Nag National Park will be as under:-

Kaz-i-Nag	34° 11′ to 34° 16′	74° 0′ to 74° 15′	3200	4272	89

The area comes under two forest series i.e Kathai Forest series & Khadinyar Forest series. Compt. 3 to 7 and upper reaches/ Lachipora & un-commercial forest (upper reaches)/ Limber fall under Kathai series & un-commercial forest (upper reaches)/Naganari under Khadinyar series.

S.No.	Name of the animal.	Population.
1.	Presbytis entellus (Duf [illegible]) Himalayan Langoor,	Common,
2.	Macaca Mulata Rhesus Macaque.	-do-
3.	Selenarctos thibetanus Himalayan Black Bear.	Occasional.
4.	Urus arctos Linnaeus Himalayan Brown Bear.	Rare.
5.	Panthera pardus (Linnaeus) Leopard or Panther.	-do-
6.	Felis bengalensis Ker Leopard Cat.	-do-
7.	Vulpus vulpus (Linnaeus) Red Fox.	Occasional.
8.	Martes flavigula (Boddaert) Himalayan Yellow-throated Martin.	-do-
9.	Ochotona roylei (Ogilby) Himalayan Mouse Hare.	-do-
	Sciuropterus sipereus Thomas.	
10.	Kashmir Flying Squirrel.	Common.
11.	rel.	Occasional.
12.	[illegible] [illegible] [illegible]	Common.
13.	Moschus [illegible] Linnaeus) Himalayan Musk [illegible]	Rare.

B. Avi-fauna:- Some birds of this proposed area are:- Black eared Kite (Milvus Migrans), Black Eagle (Aquila verreausi, Bonted Eagle, Himalayan Griffon Vulture (Gyps Himalayensis) Egyptian Vulture, Kestrel (Falco tinnunculus), Sikkara (Accipiter badius), Monal pheasant (Lophophorus impejanus), Chakur (Alectoris chakur) Koklass (Pucrasia macrolopha), Scaly-bellied green wood pecker (Picus squamatus squamatus Gould), Kashmir Bied wood pecker (Dryobates Himalayensis), Indian Myna (Acridotheres tristis), Himalayan Jungle Crow (Corvus macrorhynchos) [illegible] Jackdaw, western Yellow billed blue Magpie (Urocissa-flavirostris), Large spotted Nutcracker (Nucifraga multipunctata) White Cheeked Bulbul (Pychonotus leucogenys) Western spotted [illegible] Fork-tail (Henicurus maculatus), Himalyan Whistling Thrush (Myiophoneus caerulacku), White-capped Red-Start (chimarrhorn-leucocephalus) Streaked Laughing Thrush (Trudha lepta lineatum) Kashmir Wren (Troglodytes troglodytes), Indian Brown Dipper (Cinclus pallasii), Grey Tit (Parus major), Crested Black Tit (Lophophanes melanolophus), Hodgson's Tree-creeper (Certhia familiaris), Kashmir Sky lark (Alaemon gulgula), Kashmir House sparrow (Passer domestica), Black and yellow Gros-beak (Perrisospiza Icteroides), Orange Bullfinch (pyrrhula aurantiace), Western Red-headed Bunting (Emberiza strecheyi) Pine Bunting (Emberiza leucocephala) etc.

Site to Develop the Bee Farm:-

The proposed area [illegible] food promise as a rich potential with [illegible] honey [illegible]. It offers a vast area richly endowed with [illegible] food in the form of Isodon [illegible] (Dominant under story) and [illegible] the better food and [illegible] Moreover, the Viburnum [illegible] in autumn also.

[illegible] there are only 20 to 25 Beehives in the [illegible] yet more than 2000 Kgs of honey was [illegible] year 1990-91, which includes [illegible] local [illegible].

[illegible] in view the vast habitat and favourable [illegible] into consideration the site [illegible]

[illegible]

[illegible] the upper alpine reaches of the [illegible] the low-lying [illegible] control [illegible] which includes [illegible]

[illegible] late [illegible]

[illegible]

[illegible] grazing and the non-local grazing is proposed to be avoided altogether in whole of the catchment area.

Recommendations:-

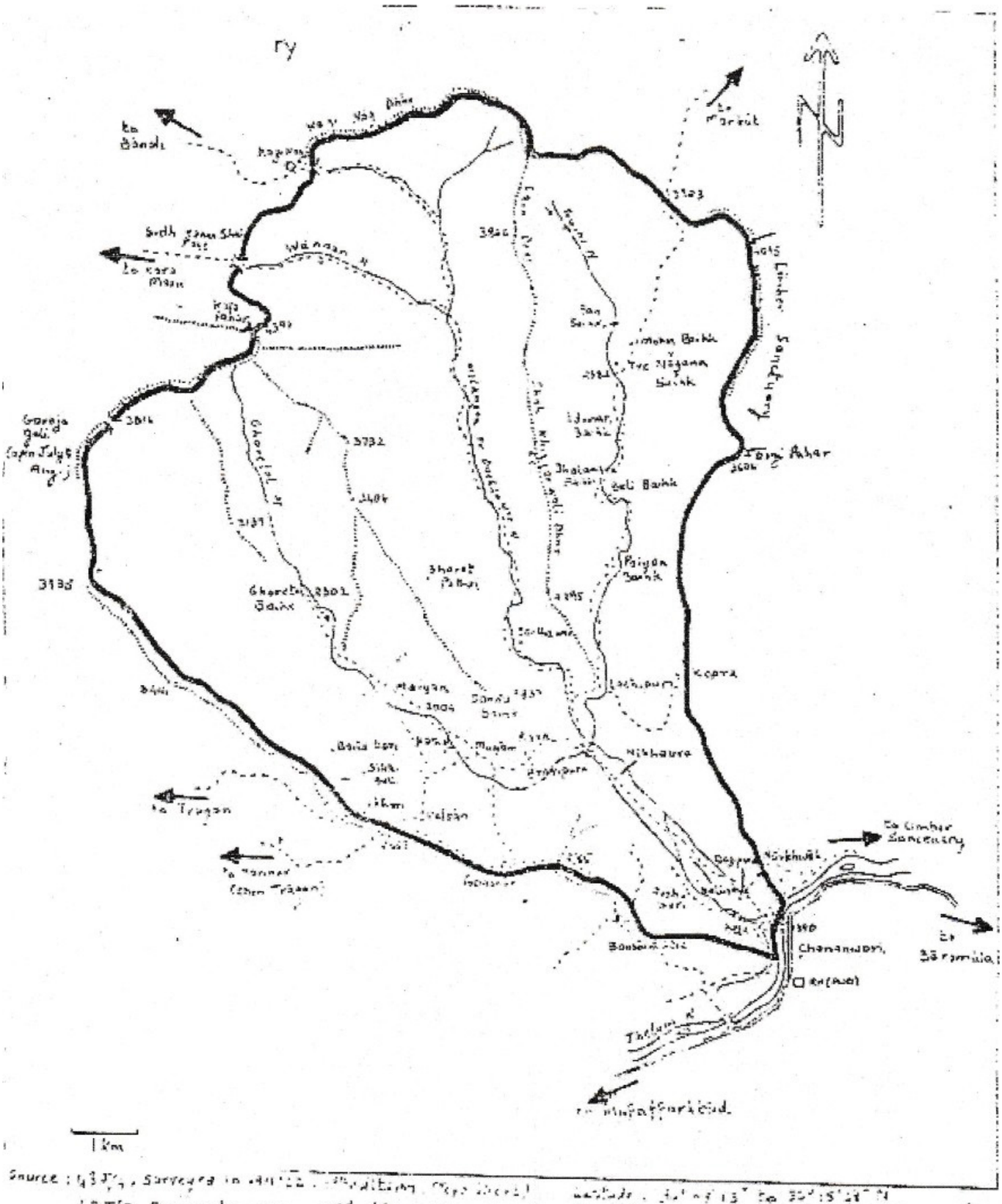
The area is harbouring the rare and threatned animals like Markhor, Musk Deer and Leopard and Pheasants, like Monal, Koklass, Chakore, and repertedly Ram Chakore and Dragopans. Markhor the majestic wild goat is distributed in a few corners of Uri and Shopian areas in Kashmir valley. The number of the Markhors and coulorful pheasants is drastically going down, moreover, these pheasnats are diwindling in number in the Himalyan belt. Many measure have been taken by the World Pheasant Association to protect the Himalyan Pheasants.

So the precious potectial of the rare and endangered animals and Pheasants it has added considerably to the importance of development of the area into a sanctuary to cater the long term interest of the Wild animals and [illegible] otherwise are threatned by the indiscriminate [illegible] destruction, heavy incidences of illicit poaching, [illegible] the security of food and shelter.

Keeping the above facts and figures into consideration the proposed area is recommended to be notified as wild life Sanctuary under Section 17 of Jammu and Kashmir Wildlife (Protection) Act of 1978.

Map:-

A detailed map of the catchment is enclosed for ready reference.



Source : 43 J/5, Surveyed in 1911 - 12, 2nd edition. (Topo sheet)
43 J/5, Surveyed in 1962, 3rd edition. (Topo sheet)
43 F/16.

Latitude : 34° 03' 13" to 34° 15' 28" N
Longitude : 74° 54' 00" to 74° 57' 06" E.

GOVERNMENT OF JAMMU AND KASHMIR
CIVIL SECTT: FOREST DEPARTMENT
(WILDLIFE PROTECTION)

NOTIFICATION
JAMMU, THE 19/3/1987

SRO 17/:- Whereas, it appears to the Government that the area specified in Annexure "A" to this Notification, has adequate ecological, faunal, floral, geomorphological significance for purposes of protecting, propagating and developing Wildlife & its environment.

Now, therefore, in exercise of the powers conferred by section 17 of the Jammu and Kashmir Wildlife (protection) Act, 1978, the Government hereby declare the said area as a sanctuary

By Order of the Government of Jammu and Kashmir.

Sd/
(N. R. Gupta)
Secretary to Government.

NO:For/WLP/San/Kishtwar/87 Dated: 19-3-1987

Copy for information and necessary action to the:-

1. Secretary to Government, Law Department.
2. Secretary to Government, Revenue Department.
3. Chief Wildlife Warden, Srinagar
4. Deputy Commissioner of the concerned Distt.
5. Manager Government press for favour of Publication in Government Gazette.
6. Stock File.

(Hamid-Ullah) 19/3
Deputy Secretary to Government
Forest Department

Hamdani 19/3

Status Survey & part of the Proposed
Limber Wildlife Sanctuary.

Introduction:-

It is called so after the name of nalla and a popular village falling in the heart of the catchment.

Location:

It is situated on the right bank of the river Jehlum, at about a distance of 74 Kms. from Srinagar city in the west. It lies the Jehlum river and Pringal village in the south.

Boundaries:-

North.....Dhurji Forest of Langat Forest Division.
South.....river Jehlum, Baramulla- Uri road and village Pringal.
East.....Katha Forest.
West.....Islamabad Forest.

Area: The toatal area of the whole water catchment of the Limber nalla is about 26 Sq.Kms, but the demarcated Game Reserve is about 12 Sq Kms. and embraces the upper reaches of the catchment

It is represented on the G.T.Sheet No.43J/4.
Map in view of the area is enclosed for ready referen

Climate:-

All the four seasons are well marked, Spring sets in mid March or early April, when snow begins to melt. The season is cold with frequent rains. The streams are flooded in the summer which sets in June and lasts till August. Autumn lasts till October, during which nights are very cold. The winter is long extending till mid March or late March. Seasons resembles more or less with the rest of the Kashmir valley.Extensive avalances & occassional land slips are characteristics of the upper reaches of the catchment.

Configuration:-

The topography is conspicuously sloopy mountanous and broken by the big rocky cliffs at the upper reaches of the catchment, i.e., the demarcated Game Reserve. The folds are thrown into number of undulations enclosing gulleys (nars).

Approach:

The area is very accessible, being well connected to Baramulla- Uri road at Chehmla, by a bridge in south. A consolidated road leads to the Bouroli Village along the right(Western) mountainous ridge of the catchment.

Habitat:

Five villages are inhabiting of 2312 human population in the catchment zone of the Limber nalla. The inhabitants have their fields and orchards in the said catchment.Moreover, they enjoy the concessions of collecting fuel, fodder and take their live stock of 1040 heads during summer to the alpine pastures of the catchment for grazing. Besides this the upper reaches of the nalla are being occupied by the live stock of the bakerwals from adjoining Poonch areas.

Contd...2...

B

Vegetation:-

General Vegetation:-

The catchments exhibits varied vegetational types manifested by the habitat, form and density of dominant species and controlled by a numer of factors including habitat condition, exposure, altitude and above all the biotic interferous vegetation which includes Deodar (Cedrus deodara) Kail (Pinus griffithii) Fir (Abies pindrow) with the sprinkling of spruce (Pidea simithiana).

The floral complex could be resolved into different biotopes.

1. Blue Pine Zone:-

This biotope is a pure crop of pine stands (Pinus griffithii) and is often accompanied by scattered stands of Deodar at low altitudes and at higher reaches with the individuals of Fir and Spruce.

Its broad-leaved associates include Acer spp, Aesculus indica, Juglans regia and Betula utilis, It is richly accompanied by Indicofora hoterantha Viburnum spp. and sparsely mix with Rosa Webbiana and Lonicera spp. In Kawchi (Gratmar) area the patches of Juniperous spp. do come into association.

It is verrually restricted to the grooves, scattered pocke s and gentle exposed southern slopes.

2. Deodar Forest :-

The deodar crop forms a pure biotope along the right but low-lying mountanous ridge of the main catchment. The under story is very rich and is being dominated by the Parrotiopsis Jacquemontiana scrub besides this stray stands of Viburnum do mix it at a few places.

3. Silver Fir Forest:-

This forest abounds in mainly the Himalayan silver Fir (Abies pindrow). The scattered stands of spruce and kail tree often mix it at higher altitude. Its main broad-leaved associates are Junglans regia, Acer spp. Aesdules indica, Betula utilis and Fraxinus spp.

The under growth includes Skimmis laureola, Viburnum spp, sparsely dotted with Rosa webbiana and patches of Juniperous spp.

The crop occupies the steep and dry slopes at higher altitudes.

contd.3...

4,Parrotispsis Scrub:

It is small community of Parrotiopsis (Stunt growth) distribuated alonc the left mountanous limt of the said nalla near the Limber village. It is mixed with the scattered stands of Viburnum spp.

5,Juglans regia community:

This assemblage is purely dominated by the Juglans regia , mixed with individuals of Acer sp. , Aesculus indica stands.

The under story is chiefly formed of Aesculus indica and Viburnum spp.

This community occupies the main valley of the lagrin nall.

6,Aesculus Indica Zone:

This forest cover abounds in mainly Aesculus indica mixed with individuals of Juglans regia stands. It is luxuriantly, associated with Sorbaia tomentosa Viburnum sp . and Aesculus indica.

This [illegible] ((Withwani),

7,Birch Cover:-

This association chiefly dominates the Betula utilis stands it gets mixed with Acer sp . Aesculus indica , Juglans regia and Abies pindrow at low altitudes.The under story includes patches of Juniperous spp. Lonicera spp. and Rhododendrons .

This cover occupies the gentle alpine gulleys.

8.Plantanous orientalis community:-

The main limber nalla is sparsely covered along its banks near the Limber village by the stands of Plantanous Orientalis.

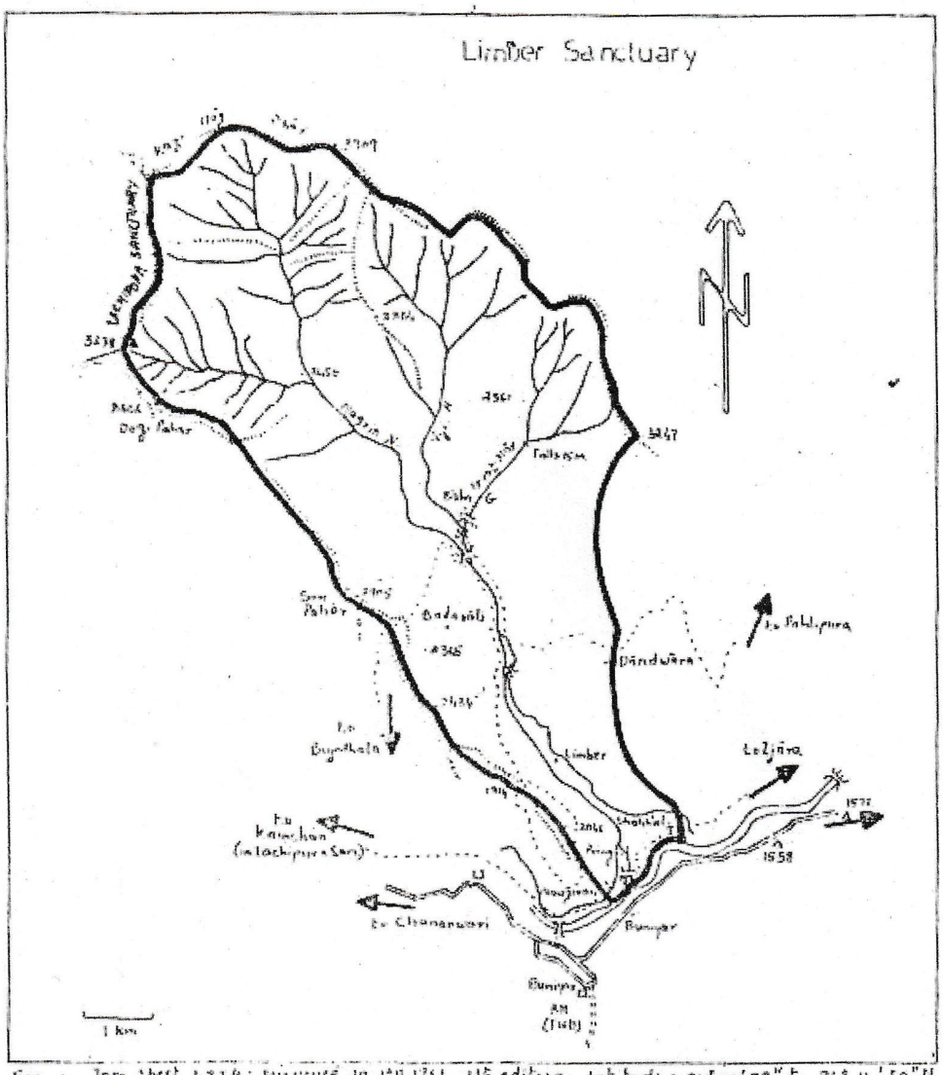
Scrub:-

This area associa in covers the exposed lowlying mountanous ridges below the Limber village, It is mixed with the individuals of Rosa, broad trees, the mountain spring its other associates are Parrotiopsis Jacquiena and Viburnum spp.

Scrub:-

[illegible] richly supported by the scrub [illegible] Salix spp. [illegible]

Cont ...4...



Source : Toposheet 43J/4; Survey of India, 1976, 1st edition. Latitude : 34° 05' 39" to 34° 14' 50" N
Longitude: 74° 06' 37" to 74° 11' 33" E.

احتیاطی تدابیر برائے تحفظ از جنگلی جانوران (خاص کر تندوہ)

۱۔ شام اور اس کے بعد جنگل میں جانے سے پرہیز کیا جائے۔

۲۔ رات کے دوران باہر جانے کے لئے لالٹین یا چوب چراغ جلا کر اپنے ساتھ رکھنا لازمی تصور کریں۔

۳۔ اکیلا آدمی جنگل کے اطراف میں نہ جائے۔

۴۔ باغوں میں وقتاً فوقتاً جاتے وقت احتیاط رکھا جائے۔

۵۔ جنگلی جانور کو دیکھ کر جمع ہونا اور اس کو تنگ کرنا۔ جانور کو اپنے آپ پر حملہ کرنے پر مجبور کرتا ہے۔

۶۔ جانور کو دیکھ کر دور سے ٹین بجانا جانور کو بھگانے کیلئے کافی ہے۔

۷۔ عورتوں کو نذدیکی جنگلوں میں بالن کے لئے جانے کی اجازت نہیں دے۔

۸۔ تندوہ کو دیکھ کر نذدیکی محکمہ جنگلات یا محکمہ وائلڈ لائف سے رابطہ کریں۔

ازطرف

محکمہ وایئلڈ لائف

نورتھ ڈیویژن، سوپور

Government of Jammu and Kashmir

Department of Wildlife Protection

OFFICE OF THE REGIONAL WILDLIFE WARDEN KASHMIR REGION
BOULEVARD ROAD SRINAGAR

PH. / Fax No: 0194-2955801
Email: rwlwkashmir@gmail.com

MEETING NOTICE

Chief Wildlife Warden, J&K Govt. has desired to convene a meeting of all the members of committee constituted vide Chief Wildlife Warden's Order No. 13 of 2020, dated: 28.01.2020 on 13th of December, 2021 at 11:00 am in his office chamber at Srinagar to discuss and finalize the Integrated Management Action Plan of Kazi-Nag National Park and Limber and Lachipora Wildlife Sanctuaries.

Accordingly, following members of the committee are requested to attend the said meeting on the scheduled, date, time and venue for further discussion and deliberation during the meeting:

1. Shri Iran Ali Shah, IFS, Conservator of Forests, Working Plan. (Through Video Conference).
2. Smt. Harpreet Kour, Special Secretary (Technical), Forest Department (Through Video Conference).
3. Wildlife Warden, North Division.
4. Dr. Sameena Amin Charoo, AWLW/ Research Officer.
5. Mr. Suhail Ahmad Wagay, Wildlife Warden, Technical (Through VC)
6. Dr. Khursheed Ahmad, Head Division of Wildlife Sciences, SKUAST, Kashmir.
7. Dr. Umar Nazir, Veterinary Assistant Surgeon,
8. Dr. Riyaz Ahmad, Representative Wildlife Trust of India.

Office of the Wild Life Wardens
R. No 624
Dt 16/12/21

Sd/-
Regional Wildlife Warden
Kashmir Region

No. RWLW/K/Tech/2021-22/ 1451-59 Dated:-09-12-2021

Copy to:

1. The Chief Wildlife Warden, Jammu and Kashmir Government, Jammu for information.
2. Shri Iran Ali Shah, IFS, Conservator of Forests, Working Plan.
3. Smt. Harpreet Kour, Special Secretary (Technical), Forest Department
4. Wildlife Warden, North Division for information and necessary action. He is requested to make a PPT on Integrated Management Action Plan incorporating all the observations/ comments of the committee members given in the previous meetings.
5. Dr. Sameena Charoo, Research Officer O/o CWLW,
6. Mr. Khurshid Ahmad, Professor/ Head Wildlife Division, SKAUST-K, Srinagar .
7. Mr. Suhail Ahmad Wagay, Wildlife Warden, Technical
8. Dr. Umer Nazir, Veterinary Assistant Surgeon,
9. Dr.Riyaz Ahamd, WTI Kashmir,

..... for information and necessary action.

Regional Wildlife Warden
Kashmir Region

Draft Minutes for Approval

Government of Jammu and Kashmir

Department of Wildlife Protection

OFFICE OF THE REGIONAL WILDLIFE WARDEN KASHMIR REGION

BOULEVARD ROAD SRINAGAR

PH. / Fax No. 0194-2955801

Email rwlwkashmir@gmail.com

Minutes of meeting of the committee constituted vide Chief Wildlife Warden's Order No. 13 of 2020, dated: 28.01.2020 regarding preparation/ formulation of Management Action Plan held under the Chairmanship of Chief Wildlife Warden, J&K Govt. at Srinagar on 13-12-2021.

In pursuance to meeting notice issued by this office vide letter No. RWLW/K/Tech/2020-21/1451-59, Dated:- 09-12-2021, Chief Wildlife Warden, J&K chaired a meeting of the committee constituted vide his Order No. 13 of 2020, dated 28.01.2020 in his office chamber at Srinagar held on 13th of December, 2021.

The following officers were present in the meeting:-

1. Shri Irfan Ali Shah, IFS, Conservator of Forests, Working Plan Circle. (Through Video Conference).
2. Dr. Harpreet Kour, Special Secretary (Technical), Forest Department (Through Video Conference).
3. Regional Wildlife Warden, Kashmir Region.
4. Dr. Khursheed Ahmad, Head Division of Wildlife Sciences, SKUAST, Kashmir.
5. Wildlife Warden, North Division.
6. Dr. Sameena Amin Charoo, AWLW/ Research Officer.
7. Mr. Suhail Ahmad Wagay, Wildlife Warden, Technical (Through VC).
8. Dr. Umar Nazir, Veterinary Assistant Surgeon,
9. Dr. Riyaz Ahmad, Representative Wildlife Trust of India

Management Plan of Kazinag National Park:

Wildlife Warden, North and Dr. Riyaz Ahmad, Project Head, WTI, J&K made a joint presentation of the Integrated Management Plan of Kazi-Nag National Park, Limber and Lachipora Wildlife Sanctuaries. The action taken report of the suggestions made in the earlier meetings was also discussed.

At the outset, the chairman of the committee, Chief Wildlife Warden, J&K informed the members of the committee that a comprehensive Management Plan of the three contiguous protected areas has been prepared by the Wildlife Warden, North in

collaboration with Wildlife Trust of India. He also informed that the suggestions made earlier in the previous meetings by the committee members have been incorporated, wherever information was available. However, in case of some suggestions, where the data is not available, the provision has to be kept as part of the future management strategy in the draft Management Plan.

Shri Irfan Ali Shah, IFS, Conservator of Forests, Working Plan Circle stressed upon the fact that the focus of the Management Plan should be on flagship species like pheasants and Markhor. He also suggested that the prescriptions be made specific and focus on sustainable management. He reiterated that the unregulated livestock grazing issue needs to be looked at and analyzed and alternate ways and areas be given a thought. He was of the opinion that in view of the fact that this area is comprised of 25 nallahs, therefore, soil and conservation measures need a top priority and a well devised strategy to achieve conservation objective accordingly shall be made a part of this management plan. He also suggested convergence of various Government schemes to uplift the socio-economic condition of the locals and reduce dependency on these protected areas should be strategized in the Plan.

Dr. Harpreet Kour, Special Secretary (Technical), Forest Administrative Department suggested that an integrated map of the contiguous landscape viz; Kazinag National Park, Limber and Lachipora Wildlife Sanctuaries may be got annexed in the Management Plan. She also suggested that the document needs a proof reading and proper formatting before it is finalized.

Dr. Khursheed Ahmad, Head Division of Wildlife Sciences, SKUAST, Kashmir congratulated the team for coming up with a Management Plan based on good research data base. He suggested that a two page write up may be prepared to list down the issues based on the research work carried out in the area and the suggestive measures against each issue. He was also of the opinion that the integrated management plan shall have focus on the unique faunal diversity like presence of seven species of pheasants and flagship species like Markhor and Goral. He suggested consultative meeting with all the stakeholders to come up with alternate grazing areas. He also suggested a movement pattern study of the major faunal species to understand the use of the area should form a part of the Plan.

In the final remarks, the Chief Wildlife Warden, Chairman of the committee, observed that the Integrated Management Plan needs to be cleared subject

to the condition that the Wildlife Warden, North will incorporate all the suggestions of the committee members. He also suggested that this Integrated Management Plan should also include a chapter on the adjoining Naganari Conservation Reserve.

The committee cleared the Integrated Management Plan of Kazinag landscape comprising of Kazinag National Park, Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary alongwith a chapter on Naganari Conservation Reserve for preparation of final draft after incorporating all the suggestions by the members in all the meetings of the committee held in this regard. In case of non -availability of specific data with regard to any suggestion, the provision shall be kept in the future management proposal. Regional Wildlife Warden, Kashmir shall recommend for approval after comprehensively going through the final draft.

The meeting ended with a vote of thanks to the chair.

Regional Wildlife Warden
Kashmir Region

No. RWLW/K/Tech/2021-22/ 1198-1505 Dated:- 16/12/2021

Copy for information to:-

1. The PCCF/Chief Wildlife Warden, J&K Government.
2. Shri Irfan Ali Shah, IFS, Conservator of Forests, Working Plan Circle.
3. Dr. Harpreet Kour, Special Secretary (Technical), Forest Department.
4. Dr. Khursheed Ahmad, Head Division of Wildlife Sciences, SKUAST, Kashmir.
5. Wildlife Warden, North Division, Sopore.
6. Dr. Umar Nazir, Veterinary Assistant Surgeon.
7. Dr. Riyaz Ahmad, Representative Wildlife Trust of India.

Boundaries:

The boundaries of the core area of Kaz-i-Nag National Park will be as under:-

North..... Kaz-i-nag Dhar and Langate Forest Division

South.....Harwaji bahak, Hilsar, Dragan bahak, Nagrin bahak, Kafarmori & Chitarkoot (3093 m)

East.....Zahanpora Forest (CO 1E/K)

West.....Line of Control (Sridhar Range

Status:

The areas are already notified as Wildlife Sanctuaries vide SRO 150 dated 19-03-1987 (Lachipora) and SRO 157 dated 19-03-1987 (Limber). The area of Lachipora Wildlife Sanctuary was under the Administrative Control of Forest Department and has been recently taken over by the Department of Wildlife Protection.

Topography:

The topography is mountainous with slopes of moderate to steep gradient broken by rocky cliffs. The terrain is undulated, criss-crossed by gullies & numerous smaller mountain drains or *nars*. The altitude varies from 1509 m to 4212 m above mean sea level (msl). The map of the area is appended with the report.

Geology, Rock & Soil:

There are heavy deposits of Gypsum & Limestone neighbouing the river Jehlum.

Climate:

The climate of the area may be described as Sub-mediterranean to typically temperate. Snow is the main source of precipitation and in some parts persists till June. Uri receives about 700-800 mm of rain annually. Four distinct seasons occur in a year: spring (March-May), summer (June-August), autumn (September-November) and winter (December-February). During winter the average temperatures remain between -3^0 - 4^0 (minimum) and 8.1^0C (maximum) while in summers the average temperatures have been recorded between 9.6^0C (minimum) and 22.8^0C (maximum)

Flora:

The dominant tree cover represents Deodar (*Cedrus deodara*), Kail (*Pinus wallichiana*) etc. The broad-leaved species include Horse chestnut (*Aesculus indica*) and Walnut (*Juglans regia*) associated with *Morus alba*, *Robinia pseudoacacia* etc. The dominant shrubs include *Parrotiopis jacquemountiana*, *Viburnum continifolium*, *Berberis lycium*, etc. The ground layer is dominated by the herb cover of *Sambucus wightiana*, *Stipa sibirca* etc. The alpine scrub lands support Birch (*Betula utilis*) associated with *Rhododendron campanulatum* & *Juniperus spp.* when the alpine pastures are carpeted with *Fritillaria spp.*, *Polygonum spp.* *Anemone spp.* etc. The rocky cliffs & hill tops are dominated by dwarf evergreen shrubs including *Juniperus recurva*, *Rhododendron anthropogon* etc. associated with herbs, *Stachya sericea*, *Sieversia salata* and *Veronica melissaefolia*.

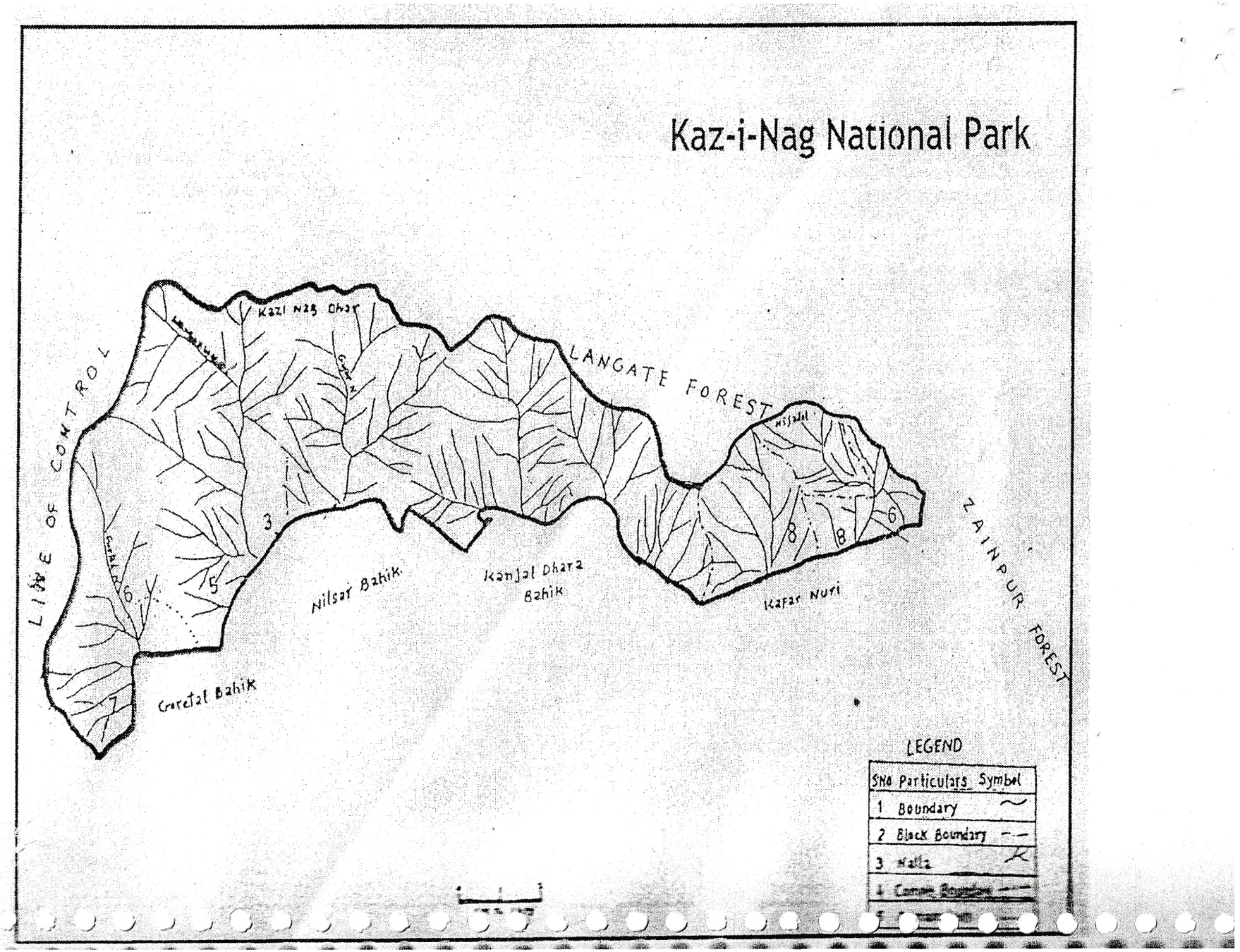
Fauna:

The tract harbours a rich wealth of Wildlife. The key animal species for which the area is ecologically significant is Kaz-i-nag Markhor (*Capra falconeri*), classified as critically endangered population in the International Union for Conservation of Nature and Natural Resources (IUCN's) Red Data Book and included in the Appendix - I of the Convention on International Trade in Endangered Species of Fauna & Flora (CITES). Other mammal species include: Himalayan Musk Deer (*Moschus crysogaster*), Goral (*Nemorhaedus goral*), Asiatic Black Bear (*Ursus thibetanus*), Himalayan Brown Bear (*Ursus arctos*), Common Leopard (*Panthera pardus*), Rhesus macaque (*Macaca mulatta*), Leopard Cat (*Prionailurus bengalensis*), Jungle Cat (*Felis chaus*), Yellow-throated Marten (*Martes flavigula*) and Himalayan Palm Civet (*Paguma larvata*) etc.

Avi-fauna:

Bird life of the area is rich & varied. The important pheasant species include Monal, Koklass, besides endangered species of Western Tragopan and Cheer pheasants.

WILDLIFE WARDEN
North Kashmir Division
Sopore


Kaz-i-Nag National Park
LINE OF CONTROL
Kazi Nag Dhar
LANGATE FOREST
ZAINPUR FOREST
Nilsar Bahik
Kanjal Dhara Bahik
Kafar Nuri
Gurefal Bahik
LEGEND
SNo Particulars Symbol
1 Boundary
2 Block Boundary
3 Walls

6

GOVERNMENT OF JAMMU AND KASHMIR
CIVIL SECTT FOREST DEPARTMENT
(WILDLIFE PROTECTION)

NOTIFICATION
JAMMU, THE / , 1987

SRO 150 :- Whereas, it appears to the Government that the area specified in Annexure "A" to this Notification, has adequate ecological, faunal, floral, geomorphological significance for purposes of protecting, propagating and developing Wildlife or its environment.

Now, therefore, in exercise of the powers conferred by section 17 of the Jammu and Kashmir Wildlife (protection) Act, 1978, the Government hereby declare the said area as a sanctuary.

By Order of the Government of Jammu and Kashmir.

Sd/-
(N. R. Gupta)
Secretary to Government.

No: For/WL/San/Lachipora/87 Dated: 19.3.1987

Copy for information and necessary action to the:-

1. Secretary to Government, Law Department.
2. Secretary to Government, Revenue Department
3. Chief Wildlife Warden, Srinagar
4. Deputy Commissioner of the concerned District
5. Manager Government press for favour of Publication in Government Gazette.
6. Stock File.

(Hamid-Ullah) 19/3
Deputy Secretary to Government
Forest Department

"Hamdani" 19/3

-27-

STATUS SURVEY REPORT OF PROPOSED LACHIPORA WILDLIFE SANCTUARY

Uri for the Markhor.

(Capra Falconeri).

Nomenclature:-

Katha Nilnag is a big catchment with eleven villages therein & Lachipora being the big and popular village, so it has been named after the said village.

Situation:- It is situated at about 83 Kms. from Srinagar City, in the West. The proposed area occupies the right bank of the river Jhelum. It drains in the said river near the village of Chananwari lying on the opposite bank of the river.

Boundaries:-

North	Kakau Forest of Langet Forest Division.
South	Maidan Forest.
South-east.....	River Jhelum, Baramulla-Uri road & village Chananwari.
West	Pass-Garuja gali and Maidan forest and Cease-fire line.
East.....	Degi pahar peak, Bagna and limber forests.

Area:- The total area of the proposed Wildlife Sanctuary is about 80 Sq. Kms. and includes the whole water catchment zone of the said nalla. It is represented on the C.T. Sheet No: 43J/3 & 43J/4

Climate:-

All the four seasons are well marked. The low-lying western area of the Jhelum valley experiences the same intensity of heat as that of the Punjab plains in the months of July, August and part of September, where as the high elevated areas above 3,300 m. (11,000 Ft). have an alpine temperature and the climate varies from place to place between these two extremes. Thus the altitudnal variations bear a great influence on the climatic conditions from place to place in the division.

From Buniyar downwards to Uri the precipitation occurs more or less in the shape of monsoon rains.

Configuration:-

The topography is conspeciously sloopy mountainous and broken by the big rocky cleffs. The folds are thrown into number of unaccessible indulations enclosing narrow gulleys (Nars) along the Upper reaches.

Approach:- The area is very easily accessible, being well connected to Baramulla-Uri National Highway at Chananwari by a foot bridge in south east.

Moreover, a metalled road has been proposed to be constructed upto Lachipora village and will be connected with the main road (Baramulla-Uri) road via bridge near Gingal.

Rights:-

Eleven villages fall in the catchment zone of the proposed area. The inhabitants have their fields and orchards in the catchment of the nalla, Moreover, they indulge in the collection of fire wood, Fodder (grass and twings of the horse chestnut trees). The locals enjoy the concession of taking their live stock to the proposed area for grazing, besides this the bakerwals from Rajouri and Poonch do take their live stock to the upper reaches (i.e. Demarcated Game Reserve) of the area for grazing.

The population of 6,905 and the permanent live stock of 5,167 present in the entire catchment of the proposed area as per the census figures of 1980-81 of the Revenue Department has been estimated.

Vegetations:-

Gen. Vegetation:- The area exhibits varied floral types manifested by habitat, form and density of dominant species and controlled by a number of factors including habitat conditions exposure, altitude and above all the biotic interferences. About sixty percent of the forest area consitutes of Ipecon spp cover and the rest of the woody vegetation comprises about 90% of the coniferous species like Deodar (Cedrus deodara), Kail (Pinus griffithii), Fir (Abies pindrow) with sprinkling of spruce (Picea smithiana) and Yew (Taxus wallichiana).

The vegetational complex could be resolved into a number of distinct types.

1. Blue Pine Zone:-

(1,630 to 2,500 Mts.) It is formed of a pure cover of kail stands (Pinus griffithii)) and is usually mixed at a few places e.g. at the mouth of Kalangan nalla with scattered stands of Deodar (Cedrus deodara) and at higher reaches with the individuals of Fir (Abies pindrow) AND spruce (Picea smithiana).

The main broad-leaved associates are Acer spp, Aesculus indica, Juglans regia, Fraxinus spp etc.

The under growth consits of Indigofera heterantha, Viburnum spp, and sprinkling of Ipecon spp, Rosa spp, and Lonicera spp. The herbaceous ground cover is very rich and consists mainly of Fragaria vesca, Sambucus spp, Polygonum spp Rumex spp, Pteridium spp, Adiantum spp, etc.

It dominates the grooves, sheltered pockets and easier steeped southern slopes.

2. Deodar Zone:-

The deodar forms almost a pure crop in the comp. 9 of the catchment. It is mixed with the isolated individuals of the Kail stands. The under story is mainly composed of Viburnum spp, Ipecon spp, Crataegus spp, Rubus spp, and regenerating of deodar.

3. Silver Fir forests:-

This zone is chiefly composed of the Himalyan Silver Fir (Abies pindrow) and spruce and kail fairly mix with Fir at higher reaches. The main broad-leaved associates are Juglans regia, Acer spp, Aesculus indica at low altitudes and Betula utilis at higher altitudes.

The under growth includes Skimmia laureola, Viburnum spp. and sparsely Rosa sbligna.

The Biotope is vertually distributed along the steep and dry slopes upto 11,000 feet.

4. Birch Layer:-

Forest Community dominated by Betula utilis stands but at some places gene ally at low altitudes isolated stands of Acer spp, Salix wildlow do mix xxx it, Sparse shrub cover copes into composition with it includes patches of Juniperous spp, Lonicera spp, Rhododendron spp, and Viburnum spp, This cover is distributed in gulleys 'nars).

5. Horse Chest Nut Zone:-

This cover abounds chiefly Aesculus indica mixed with the scattered individuls of Juglans regia and Acer spp, It is richly supported by scruby layer of Berberis tomentosa, Viburnum spp, Rosa Webbiana and Aesculus indica, It shattters a rich harbaceous cover of Adiantum spp, Rumex patientia,

This biotope occupies the gentle shaddy slopes and gulleys.

6. Isodon Scrub:-

The pure crop of Isodon spp, is districuted along the exposed and low lying ridges, It is mixed at places with the scattered stands of Kail trees, Its other associates are Viburnum (along the shaddy drains), Spirea spp, Rubus spp, and Cotoneaster spp, The ground cover mainly constitutes of Arenisia spp, Dryopteris spp etc.

7. Savana scrub:-

A pure tall un-identified coarse grass cover mixed with isolated individuals of kail trees (Pinus griffithii), It is luxuriantly accompanied with under story e.g. Indigofera heterantha and sparse cover of Rosa webbiana and Rubus spp,

This association is vertually restricted in the forest clearings and exposed slopes.

8. Alpine pastures:-

This zone appears from the uppermost limit of the fir zone in the form of vast pasture lands viz "margs" The vegetation comprises stunted trees of birch (Betula utilis), Juniperous spp, patches and individuals of Rhododendron spp,

The ground flora includes chrysanthemum leucanthemum, Inula spp, Caltha palustris, Primula spp, Potentilla spp, Corydalis spp, Gentiana spp, Anemone spp, Mysotis spp, Polygonum spp etc.

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-09062021-227428
CG-DL-E-09062021-227428

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 2020] नई दिल्ली, मंगलवार, जून 8, 2021/ज्येष्ठ 18, 1943
No. 2020] NEW DELHI, TUESDAY, JUNE 8, 2021/JYAISHTHA 18, 1943

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 7 जून, 2021

का.आ. 2180(अ).—अधिसूचना का निम्नलिखित प्रारुप, जिसे केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (2) के खंड (v) और खंड (xiv) तथा उपधारा (3) के साथ पठित उपधारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, जारी करने का प्रस्ताव करती है, को पर्यावरण (संरक्षण) नियमावली, 1986 के नियम 5 के उपनियम (3) की अपेक्षानुसार, जनसाधारण की जानकारी के लिए प्रकाशित किया जाता है, जिनके उससे प्रभावित होने की संभावना है, और यह सूचित किया जाता है कि उक्त प्रारूप अधिसूचना पर, उस तारीख से, जिसको इस अधिसूचना को अंतर्विष्ट करने वाले भारत के राजपत्र की प्रतियां जनसाधारण को उपलब्ध करा दी जाती हैं, साठ दिन की अवधि की समाप्ति पर या उसके पश्चात् विचार किया जाएगा;

ऐसा कोई व्यक्ति, जो प्रारूप अधिसूचना में अंतर्विष्ट प्रस्तावों के संबंध में कोई आपत्ति या सुझाव देने का इच्छुक है, वह विनिर्दिष्ट अवधि के भीतर, केन्द्रीय सरकार द्वारा विचार किए जाने के लिए अपनी आपत्ति या सुझाव सचिव, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोर बाग रोड, अलीगंज, नई दिल्ली-110003 को लिखित रूप में या ई-मेल esz-mef@nic.in पर भेज सकता है।

प्रारूप अधिसूचना

काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य और लचीपोरा वन्यजीव अभयारण्य जम्मू और कश्मीर, जम्मू प्रांत में 181 वर्ग किलोमीटर के कुल क्षेत्रफल में फैला हुआ है।

और, काज़िनाग राष्ट्रीय उद्यान अधिसूचना सं.एस.आर.ओ सं.: 425, तारीख 18 दिसंबर, 2007 को 89.00 वर्ग किलोमीटर क्षेत्रफल के अंतर्गत राष्ट्रीय उद्यान के रूप में अधिसूचित किया गया। लीम्बर वन्यजीव अभयारण्य एस.आर.ओ.सं.:157, तारीख 19 मार्च, 1987 को 12 वर्ग किलोमीटर के क्षेत्रफल के अंतर्गत वन्यजीव अभयारण्य के रूप में अधिसूचित किया गया और लचीपोरा वन्यजीव अभयारण्य एस.आर.ओ.सं.:150, तारीख 19 मार्च, 1987 को 80.00 वर्ग किलोमीटर के क्षेत्रफल के अंतर्गत वन्यजीव अभयारण्य के रूप में अधिसूचित किया गया।

और, काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य और लचीपोरा वन्यजीव अभयारण्य वनस्पति और जीवजंतु की अच्छी जैव-विविधता का प्रतिनिधित्व करते हुए सबसे महत्त्वपूर्ण प्राकृतिक विरासत बनाता है। यह क्षेत्र पीर पंजल मरखोर (कपरा फलकोनेरी) और स्थानिक कश्मीर मस्क डियर (मोस्यूस कूपरेयूस) की अंतिम लाभप्रद जनसंख्या के वास के लिए जाना जाता है। यह क्षेत्र प्रकृति प्रेमियों, बर्ड वॉचर, पर्वतारोहियों, पारिस्थिति विज्ञानी, शोधकर्ताओं और पर्यटकों के लिए प्राचीन अवस्थान प्रदान करता है।

और, क्षेत्र का भू-आकृति विज्ञान और स्थलाकृतिक क्षेत्र ऊंचाई अनुक्रम में शीतोष्ण कोनिफर की मेसोफाइटिक वनस्पति का आश्रय प्रदान करता है और विविध वन के प्रकार, अल्पाइन वासों के हरे-भरे घास के मैदान इस तरह के जैविक और पारिस्थितिकी विरासत के लिए अधिक अद्भुत बनाते है और इसलिए, आगामी पीढ़ियों के लिए इसे संरक्षित करने के लिए वन्यजीव प्रजातियों के प्रभावी संरक्षण, सुरक्षा और बेहतर प्रवर्धन का आह्वान किया गया।

और, काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य और लचीपोरा वन्यजीव अभयारण्य देवदार वुड कवर, ब्लू पाइन वन, सिल्वर फॅर कनौपी, बृहत्-पत्ती वुडलैंड, बर्च वन, आइसोडेन झाड़ी, सावाना झाड़ी और अल्पाइन चरागाह के साथ शंकुधारी वनों में शामिल हैं। क्षेत्र में जीवजंतु प्रजातियों की विविधता जैसे देवदार (*सेडरस देवदारा*), पर्रोटिया (*पर्रोटिओप्सिस जेक्यूइमोंटिअना*), कैल (*पाइनस वाल्लीचिना), फर* (*एबिइस पिंड्रो*), स्प्रूस (*पीसिया स्मिथीआना*), हॉर्स चेस्टनट (*ऐस्कुलुस इंडिका*), वाल्नट (*जगलांस रेगिया*), *अकेर कप्पाडोकिकम, बेटुला उटीलिस, इंडिगोफेरा हेटेरंथा, वेबरनम ग्रांडीफलोरम, रोसा वेब्बिआना, लोनिकेरा क्यूइंक्इलोकुलारिस,* चीनार (*प्लैटैनस ओरिएंटलिस*), *जुनिपेरस रेकुर्वा, रेहोडोडेंड्रोन एंन्थोगोन, इसोडोन रगोसस, पाइनस ग्रिफ्फिथी* आदि भी है।

और, *रोज़र्स और पवार* (1988) *द्वारा जम्मू और कश्मीर केंद्र शासित के जैव-भौगोलिक सीमांकन के अनुसार काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य और नागानारी संरक्षण रिज़र्व हिमालयन जोन के उत्तर-पश्चिम हिमालयन प्रांत के अंतर्गत आते है। भारत-चीनी रूपों की कई प्रजातियों की उपस्थिति से जीवजंतु जीवन विशिष्ट है। जीवजंतु तत्व उत्तरी पैलियार्टिक जीवजंतु के साथ-साथ पूर्वी और ओरिएंटल जीवजंतु के साथ संबंध दिखाते है, जो महान संरक्षण मूल्य का अद्भुत संयोजन बनाते है।*

और, *क्षेत्र में दुर्लभ, संकटापन्न और लुप्तप्राय जीवजंतु प्रजातियों की बृहत् विविध जैसे* एशियाई काला भालू (*उर्सस थिबेटानस*), हिमालयन ब्राउन भालू (*उरसूस आर्कटोस इसाबेल्लिनस*), तेंदुआ (*पेन्थेरा प्रज्यूस*), तेंदुआ बिल्ली (*प्रिरओनाइलुरूस बेंगालेंसिस),* जंगली बिल्ली *(फेलिस चाउस*), रेड लोमड़ी (*वुल्पेस वुल्पेस*), सियार (*कैनिस ऑरियस*), येलो- थ्रोटेड मार्टिन *(मारटेस फलाविगुला)*, माउंटेन वेअसेल *(मुस्टेला अलटाइका)*, भारतीय साही *(हिस्ट्रीक्स **इंडिका**)*, हिमालयन ग्रे लंगूर (सेम्नापिथेकस अजाक्स*)*, रीसस मकाक ***(मकाका मुलाट्टा)***, हिमालयन ग्रे गोरल ***(नेमोरहाइडस बेडफोरदी)***, हिमालयन पाल्म सिवेट***(पागुमा लारवाटा)***, बनैला सूअर (*सस स्क्रोफ़ा*), रोयले पिका ***(ओचोटोना रोयलेइ)***, हाउस श्रेव (*सुंकस मुरीनस)*, कश्मीर फ्लाईंग गिलहरी (***इओगलाउकोम्यस फिम्बरीअटस) आदि है।***

और, काज़िनाग राष्ट्रीय उद्यान**,** लीम्बर वन्यजीव अभयारण्य**,** लचीपोरा वन्यजीव अभयारण्य में पक्षियों की 120 प्रजातियों का वास है जो लगभग 36 परिवारों का प्रतिनिधित्व करता है। क्षेत्र में मौजूद पक्षियों की कुछ प्रजातियां हिमालयन ग्रिफॉन *(जिप्सी हिमालयनसिस)*, बेअरडेड गिद्ध *(गयपैटस बारबेटस)*, पश्चिम ट्रागोपन *(ट्रागोपन मेलानोकेफलुस) चीर तीतर* (*कटरेउस वाल्लिची*), हिमालयन मोनल *(लोफोफोरूस इम्पेजानस)*, कोकलास्स तीतर (*पुकरासिया माकरोलोफा)*, लार्ज-स्पोट्टेड नटक्रैकर *(नकिफेरगा मुलटीपुंकटाटा)*, रेड-बिल्ड चौगह *(प्यररहोकरस प्यररहोकरस)*, ग्रे-हेडेड केनरी फ्लाईकैचर (*कुलिकिकापा केयलोनेंसिस)*, कश्मीर नूठातच *(सिट्टा कश्मिरेंसिस)*, रॉक बुंटीग *(इम्बेरीजा किया) आदि है।*

और, काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य के चारों ओर के क्षेत्र को, जिसका विस्तार और सीमाएं इस अधिसूचना के पैराग्राफ 1 में विनिर्दिष्ट हैं, को पारिस्थितिकी, पर्यावरणीय और जैव-

विविधता 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) नियमावली, 1986 के नियम 5 के उपनियम (3) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) (जिसे इस अधिसूचना में इसके पश्चात् पर्यावरण अधिनियम कहा गया है) की उपधारा (1)तथा धारा 3 की उपधारा (2) के खंड (v) और खंड (xiv) एवं उपधारा (3) के द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, जम्मू और कश्मीर केंद्र शासित प्रदेश के काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य की सीमा के चारों ओर 0 (शून्य) से 5 किलोमीटर क्षेत्र को काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य के 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 काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य की सीमा के चारो ओर 0 (शून्य) से 5 किलोमीटर के साथ 69.97 वर्ग किलोमीटर तक विस्तृत है। विभिन्न दिशाओं (किलोमीटर) में पारिस्थितिकी संवेदी जोन का विस्तार नीचे दिया गया है:

विवरण	**विस्तार (किलोमीटर)**
उत्तर	1.5
उत्तर-पूर्व	1.5
पूर्व	0.05
दक्षिण-पूर्व	5.0
दक्षिण	0.05
दक्षिण-पश्चिम	0.05
पश्चिम	0.00
उत्तर-पश्चिम	0.00

वास्तविक नियंत्रण रेखा की उपस्थिति के कारण और मानव बस्तियों के कारण भी पश्चिम और उत्तर-पश्चिम दिशा की ओर पारिस्थितिकी संवेदी जोन का शून्य विस्तार है।

(2) काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य और इसके पारिस्थितिकी संवेदी जोन की सीमा का विवरण अनुलग्नक-I के रूप में संलग्न है।

(3) सीमा विवरण और अक्षांशों और देशांतरों के साथ पारिस्थितिकी संवेदी जोन को सीमांकित करते हुए काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य के मानचित्र **अनुलग्नक–IIक, अनुलग्नक –IIख, अनुलग्नक –IIग, अनुलग्नक –IIघ** और **अनुलग्नक –IIङ** के रूप में संलग्न है।

(4) काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य, लचीपोरा वन्यजीव अभयारण्य और पारिस्थितिकी संवेदी जोन की सीमा के भू- निर्देशांकों की सूची अनुलग्नक-III की सारणी क और सारणी ख में दी गई है।

(5) मुख्य बिंदुओं के भू-निर्देशांकों के साथ पारिस्थितिकी संवेदी जोन के अंतर्गत आने वाले ग्रामों की सूची **अनुलग्नक IV** के रूप में संलग्न है।

2. पारिस्थितिकी संवेदी जोन के लिए आंचलिक महायोजना.–(1) केंद्र शासित प्रदेश सरकार, द्वारा पारिस्थितिकी संवेदी जोन के प्रयोजन 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, केंद्र शासित प्रदेश सरकार के सक्षम प्राधिकारी के अनुमोदनार्थ एक आंचलिक महायोजना बनाई जायेगी।

(2) केंद्र शासित प्रदेश सरकार द्वारा पारिस्थितिकी संवेदी जोन के लिए आचंलिक महायोजना, इस अधिसूचना में विनिर्दिष्ट रीति से तथा प्रासंगिक केंद्रीय और केंद्र शासित प्रदेश की विधियों के अनुरूप तथा केंद्रीय सरकार द्वारा जारी किए गए दिशा निर्देशों, यदि कोई हों, के अनुसार बनायी जाएगी।

(3) आंचलिक महायोजना में पारिस्थितिकी और पर्यावरण संबंधी सरोकारों को शामिल करने के लिए इसे केंद्र शासित प्रदेश सरकार के निम्नलिखित विभागों के परामर्श से बनाया जाएगा, अर्थात्:-

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

(4) जब तक इस अधिसूचना में विनिर्दिष्ट न हो, आंचलिक महायोजना में वर्तमान में अनुमोदित भू-उपयोग, अवसंरचना और क्रियाकलापों पर कोई प्रतिबंध नहीं लगाया जाएगा तथा आचंलिक महायोजना में सभी अवसंरचनाओं और क्रियाकलापों में सुधार करके उन्हे अधिक दक्ष और पारिस्थितिकी-अनुकूल बनाने की व्यवस्था की जाएगी।

(5) आंचलिक महायोजना में वनरहित क्षेत्रों के सुधार, विद्यमान जल निकायों के संरक्षण, जलग्रहण क्षेत्रों के प्रबंधन, जल-संभरों के प्रबंधन, भू-जल के प्रबंधन, मृदा और नमी के संरक्षण, स्थानीय जनता की आवश्यकताओं तथा पारिस्थितिकी एवं 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 एवं शहरी बस्तियों, वनों की श्रेणियों एवं किस्मों, कृषि क्षेत्रों, ऊपजाऊ भूमि, उद्यानों एवं उद्यानों की तरह के हरित क्षेत्रों, बागवानी क्षेत्रों, बगीचों, झीलों और अन्य जल निकायों की सीमा का सहायक मानचित्र के साथ निर्धारण किया जाएगा और मौजूदा और प्रस्तावित भू-उपयोग की विशेषताओं का ब्यौरा भी दिया जाएंगा।

(7) आंचलिक महायोजना में पारिस्थितिकी संवेदी जोन में होने वाले विकास का विनियमन किया जाएगा और सारणी में यथासूचीबद्ध पैराग्राफ 4 में प्रतिषिद्ध एवं विनियमित क्रियाकलापों का पालन किया जाएगा। इसमें स्थानीय जनता की आजीविका की सुरक्षा के लिए पारिस्थितिकी-अनुकूल विकास का भी सुनिश्चय एवं संवर्धन किया जाएगा।

(8) आंचलिक महायोजना, क्षेत्रीय विकास योजना की सह-कालिक होगी ।

(9) अनुमोदित आंचलिक महायोजना, निगरानी समिति के लिए एक संदर्भ दस्तावेज होगी ताकि वह इस अधिसूचना के उपबंधों के अनुसार निगरानी के अपने कर्तव्यों का निर्वहन कर सके ।

3. **केंद्र शासित प्रदेश सरकार द्वारा किए जाने वाले उपाय.-** केंद्र शासित प्रदेश सरकार इस अधिसूचना के उपबंधों को प्रभावी बनाने के लिए निम्नलिखित उपाय करेगी, अर्थात्:-

(1) **भू-उपयोग.–** (क) पारिस्थितिकी संवेदी जोन में वनों, बागवानी क्षेत्रों, कृषि क्षेत्रों, मनोरंजन के लिए चिन्हित उद्यानों और खुले स्थानों का वृहद वाणिज्यिक या आवासीय परिसरों या औद्योगिक क्रियाकलापों के लिए प्रयोग या संपरिवर्तन अनुमत नहीं किया जाएगा:

परंतु पारिस्थितिकी संवेदी जोन के भीतर ऊपर भाग (क), में विनिर्दिष्ट प्रयोजन से भिन्न प्रयोजन के लिए कृषि और अन्य भूमि का संपरिवर्तन, निगरानी समिति की सिफारिश पर और क्षेत्रीय नगर योजना अधिनियम तथा यथा लागू केन्द्रीय सरकार एवं केंद्र शासित प्रदेश सरकार के अन्य नियमों एवं विनियमों के अधीन सक्षम प्राधिकारी के पूर्व अनुमोदन से तथा इस अधिसूचना के उपबंधों के अनुसार स्थानीय निवासियों की निम्नलिखित आवासीय जरूरतों को पूरा करने के लिए अनुमत किया जाएगा जैसे:-

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

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

(iii) प्रदूषण उत्पन्न न करने वाले लघु उद्योग;

(iv) कुटीर उद्योग एवं ग्राम उद्योग; पारिस्थितिकी पर्यटन में सहायक सुविधा भण्डार और स्थानीय सुविधाएं तथा गृह वास; और

(v) पैराग्राफ-4 में उल्लिखित बढ़ावा दिए गए क्रियाकलाप:

परंतु यह भी कि क्षेत्रीय शहरी नियोजन अधिनियम के अधीन सक्षम प्राधिकारी के पूर्व अनुमोदन के बिना तथा केंद्र शासित प्रदेश सरकार के अन्य नियमों एवं विनियमों एवं संविधान के अनुच्छेद 244 के उपबंधों या 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 प्रयोग अनुमत नहीं होगा:

परंतु यह भी कि पारिस्थितिकी संवेदी जोन के अंतर्गत आने वाली भूमि के अभिलेखों में हुई किसी त्रुटि को, निगरानी समिति के विचार प्राप्त करने के पश्चात्, केंद्र शासित प्रदेश सरकार द्वारा प्रत्येक मामले में एक बार सुधारा जाएगा और उक्त त्रुटि को सुधारने की सूचना केंद्रीय सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को दी जाएगी:

परंतु यह भी कि उपर्युक्त त्रुटि को सुधारने में, इस उप-पैरा में यथा उपबंधित के सिवाय, किसी भी दशा में भू-उपयोग का परिवर्तन शामिल नहीं होगा।

(ख) अनुप्रयुक्त या अनुत्पादक कृषि क्षेत्रों में वनीकरण तथा पर्यावासों की बहाली के कार्यकलापों से पुन: वनीकरण के प्रयास किए जाएंगे।

(2) **प्राकृतिक जल स्रोत.**- सभी प्राकृतिक जलमार्गों के जलग्रहण क्षेत्रों की पहचान की जाएगी और आंचलिक महायोजना में उनके संरक्षण और बहाली की योजना सम्मिलित की जाएगी और केंद्र शासित प्रदेश सरकार द्वारा दिशा-निर्देश इस रीति से तैयार किए जाएंगे कि उसमें ऐसे क्षेत्रों में या उसके पास उन विकास क्रियाकलापों को प्रतिषिद्ध और निर्बंधित किया गया हो, जो ऐसे क्षेत्रों के लिए हानिकारक हो।

(3) **पर्यटन एवं पारिस्थितिकी पर्यटन.–** (क) पारिस्थितिकी संवेदी जोन में सभी नए पारिस्थितिकी पर्यटन क्रियाकलाप या विद्यमान पर्यटन क्रियाकलापों का विस्तार पारिस्थितिकी संवेदी जोन संबंधी पर्यटन महायोजना के अनुसार अनुमत होगा।

(ख) पारिस्थितिकी पर्यटन महायोजना, केंद्र शासित प्रदेश सरकार के पर्यावरण और वन विभाग के परामर्श से केंद्र शासित प्रदेश के पर्यटन विभाग द्वारा बनायी जाएगी।

(ग) पर्यटन महायोजना आंचलिक महायोजना का घटक होगी।

(घ) पर्यटन महायोजना, पारिस्थितिकी संवेदी जोन की वहन क्षमता के संबंध में किए गए अध्ययन के आधार पर तैयार की जायेगी।

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

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

परंतु यह, पारिस्थितिकी पर्यटन सुविधाओं के लिए संरक्षित क्षेत्र की सीमा से एक किलोमीटर की दूरी से परे पारिस्थितिकी संवेदी जोन की सीमा तक, पूर्व परिभाषित और अभीहित क्षेत्रों में पर्यटन महायोजना के अनुसार, नए होटलों और रिजॉर्ट की स्थापना अनुमत होगी;

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

(iii) आंचलिक महायोजना का अनुमोदन होने तक, पर्यटन के विकास और विद्यमान पर्यटन क्रियाकलापों के विस्तार को वास्तविक स्थल-विशिष्ट संवीक्षा तथा निगरानी समिति की सिफारिश के आधार पर संबंधित विनियामक प्राधिकरणों द्वारा अनुमत किया जाएगा और पारिस्थितिकी संवेदी जोन में किसी नए होटल/ रिजॉर्ट या वाणिज्यिक प्रतिष्ठान का निर्माण अनुमत नहीं होगा।

(4) **प्राकृतिक विरासत.–** पारिस्थितिकी संवेदी जोन के अंतर्गत आने वाले बहुमूल्य प्राकृतिक विरासत के सभी स्थलों जैसे कि जीन पूल रिजर्व क्षेत्र, शैल संरचना, जल प्रपात, झरने, दर्रे, उपवन, गुफाएं, स्थल, वनपथ, रोहण मार्ग, उत्प्रपात आदि की पहचान की जाएगी और उनकी सुरक्षा एवं 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 संबधी, 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 पारिस्थितिकी संवेदी जोन में ध्वनि प्रदूषण की रोकथाम और नियंत्रण किया जाएगा।

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

(8) **बहिस्राव का निस्सरण.**- पारिस्थितिकी संवेदी जोन में उपचारित बहिस्राव का निस्सरण, पर्यावरण अधिनियम और उसके अधीन बनाए गए नियमों के अधीन आने वाले पर्यावरणीय प्रदूषण के निस्सरण के लिए साधारण मानकों या केंद्र शासित प्रदेश सरकार द्वारा नियत मानकों, जो भी अधिक कठोर हो, के उपबंधों के अनुसार होगा।

(9) **ठोस अपशिष्ट.-** ठोस अपशिष्ट का निपटान एवं प्रबन्धन निम्नानुसार किया जाएगा:-

(क) पारिस्थितिकी संवेदी जोन में ठोस अपशिष्ट का निपटान और प्रबंधन भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की समय-समय पर यथा संशोधित अधिसूचना सं. का.आ. 1357(अ), दिनांक 8 अप्रैल, 2016 के तहत प्रकाशित ठोस अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार किया जाएगा; अकार्बनिक पदार्थो 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 का प्रयोग करते हुए विद्यमान नियमों और विनियमों के अनुरूप ठोस अपशिष्ट का सुरक्षित और पर्यावरण अनुकूल प्रबंधन अनुमत किया जायेगा।

(10) **जैव चिकित्सा अपशिष्ट.**- 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 समय–समय पर यथा संशोधित अधिसूचना सं.सा.का.नि 343 (अ), तारीख 28 मार्च, 2016 के तहत प्रकाशित जैव चिकित्सा अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार किया जाएगा।

(ख) पारिस्थितिकी संवेदी जोन में अभिज्ञात प्रौद्योगिकियों का प्रयोग करते हुए विद्यमान नियमों और विनियमों के अनुरूप जैव चिकित्सा अपशिष्ट का सुरक्षित और पर्यावरण अनुकूल प्रबंधन अनुमत किया जायेगा।

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

(12) **निर्माण और विध्वंस अपशिष्ट का प्रबंधन.-** पारिस्थितिकी संवेदी जोन में निर्माण और विध्वंस अपशिष्ट का प्रबंधन, 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 के तहत 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, भारत सरकार के 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) **सड़क-यातायात.-** सड़क-यातायात को पर्यावास-अनुकूल तरीके से विनियमित किया जाएगा और इस संबंध में आंचलिक महायोजना में विशेष उपबंध शामिल किए जाएंगे। आंचलिक महायोजना के तैयार होने और केंद्र शासित प्रदेश सरकार के सक्षम प्राधिकारी से अनुमोदित होने तक, निगरानी समिति प्रासंगिक अधिनियमों और उनके तहत बनाए गए नियमों एवं विनियमों के अनुसार सड़क-यातायात के अनुपालन की निगरानी करेगी।

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

(16) **औद्योगिक ईकाइयां.-** (क) सरकारी राजपत्र में इस अधिसूचना के प्रकाशन की तारीख को या उसके बाद पारिस्थितिकी संवेदी जोन में किसी नए प्रदूषणकारी उद्योग की स्थापना की अनुमति नहीं होगी।

(ख) केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा फरवरी, 2016 में जारी समय-समय पर यथा संशोधित मार्गदर्शक सिद्धान्तों में उद्योगों के वर्गीकरण के अनुसार, जब तक कि अधिसूचना में इस प्रकार विनिर्दिष्ट न हो, पारिस्थितिकी संवेदी जोन के भीतर केवल गैर- प्रदूषणकारी उद्योगों को अनुज्ञात किया जाएगा और इसके अतिरिक्त, गैर प्रदूषणकारी 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 अनुज्ञा नहीं होगी ।

4. पारिस्थितिकी संवेदी जोन में प्रतिषिद्ध या विनियमित किए जाने वाले क्रियाकलापों की सूची- पारिस्थितिकी संवेदी जोन में सभी क्रियाकलाप, पर्यावरण अधिनियम और उसके अधीन बने नियमों के उपबंधों जिसमें तटीय विनियमन जोन, 2011 एवं पर्यावरणीय प्रभाव आकलन अधिसूचना, 2006 शामिल है सहित वन (संरक्षण) अधिनियम, 1980 (1980 का 69), भारतीय वन अधिनियम, 1927 (1927 का 16), वन्यजीव (संरक्षण) अधिनियम, 1972 (1972 का 53) 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	टिप्पणी
	क. प्रतिषिद्ध क्रियाकलाप	
1.	वाणिज्यिक खनन, पत्थर उत्खनन और अपघर्षण इकाइयां ।	(क) पारिस्थितिकी संवेदी जोन के अंतर्गत वास्तविक स्थानीय निवासियों की घरेलू आवश्यकताओं जिसमें मकानों के संनिर्माण या मरम्मत के लिए धरती को खोदना सम्मिलित है, के सिवाय सभी प्रकार के नए और विद्यमान खनन (लघु और वृहत खनिज), पत्थर उत्खनन और अपघर्षण इकाइयां तत्काल प्रभाव से प्रतिषिद्ध होंगी; (ख) खनन प्रचालन, 1995 की रिट याचिका (सिविल) सं. 202 में टी.एन. गौडाबर्मन थिरुमूलपाद बनाम भारत संघ के मामले में

		माननीय उच्चतम न्यायालय 4 अगस्त, 2006 के आदेश और 2012 की रिट याचिका (सिविल) सं. 435 में गोवा फाउंडेशन बनाम भारत संघ के मामले में तारीख 21 अप्रैल, 2014 के आदेश के अनुसरण में 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 अनुमति नहीं होगी: परन्तु यह कि केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा फरवरी, 2016 में जारी समय-समय पर यथासंशोधित मार्गदर्शक सिद्धान्तों में उद्योगों के वर्गीकरण के अनुसार, जब तक कि अधिसूचना में ऐसा विनिर्दिष्ट न हों, पारिस्थितिकी संवेदी जोन के भीतर गैर-प्रदूषणकारी उद्योगों को अनुज्ञात किया जाएगा और इसके अतिरिक्त गैर-प्रदूषणकारी कुटीर उद्योगों को बढ़ावा दिया जाएगा।
3.	बड़ी जल विद्युत परियोजनाओं की स्थापना।	प्रतिषिद्ध।
4.	किसी परिसंकटमय पदार्थ का प्रयोग या उत्पादन या प्रस्संकरण।	प्रतिषिद्ध।
5.	प्राकृतिक जल निकायों या भूमि क्षेत्र में अनुपचारित बहिस्रावों का निस्सरण।	प्रतिषिद्ध।
6.	नई आरा मिलों की स्थापना।	पारिस्थितिकी संवेदी जोन के भीतर नई और विद्यमान आरा मिलों का विस्तार अनुमत नहीं होगा।
7.	ईंट भट्टों की स्थापना करना।	प्रतिषिद्ध।
8.	जलावन लकड़ी का वाणिज्यिक उपयोग।	प्रतिषिद्ध।
9.	पोलिथीन बैगों का प्रयोग।	प्रतिषिद्ध।
10.	पर्यटन से संबंधित अन्य क्रियाकलाप जैसे वायुयान, गर्म वायु गुब्बारें, आदि द्वारा राष्ट्रीय उद्यान क्षेत्र के ऊपर से उड़ना जैसे क्रियाकलाप करना।	प्रतिषिद्ध।
ख.विनियमित क्रियाकलाप		
11.	होटलों और रिसोर्टों की वाणिज्यिक स्थापना।	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 सीमा तक, इनमें जो भी अधिक निकट हो, नए वाणिज्यिक होटलों और रिर्सोटो की स्थापना अनुमत नहीं होगी: परंतु, संरक्षित क्षेत्र की सीमा से एक किलोमीटर बाहर या पारिस्थितिकी संवेदी जोन की सीमा तक, इनमें जो भी अधिक निकट हो, पर्यटन महायोजना और लागू दिशानिर्देशों के अनुसार सभी नए पर्यटन क्रियाकलाप करने या विद्यमान क्रियाकलापों का विस्तार करने की अनुज्ञा होगी।
12.	संनिर्माण क्रियाकलाप।	(क) संरक्षित क्षेत्र की सीमा से एक किलोमीटर के भीतर या

		पारिस्थितिकी संवेदी जोन के विस्तार तक जो भी निकट हो, किसी भी प्रकार का वाणिज्यिक संनिर्माण अनुमत नहीं किया जाएगा: परंतु स्थानीय लोगों को पैराग्राफ 3 के उप पैराग्राफ (1) में सूचीबद्ध क्रियाकलापों सहित उनके उपयोग के लिए उनकी भूमि में स्थानीय निवासियों की आवासीय आवश्यकताओं को पूरा करने लिए संनिर्माण करने की अनुमति भवन उपविधियों के अनुसार दी जाएगी: परन्तु ऐसे लघु उद्योगों जो प्रदूषण उत्पन्न नहीं करते हैं, से संबंधित संनिर्माण क्रियाकलाप विनियमित किए जाएंगे और लागू नियमों और विनियमों, यदि कोई हों, के अनुसार सक्षम प्राधिकारी की पूर्व अनुमति से ही न्यूनतम पर रखे जाएंगे । (ख) एक किलोमीटर से आगे आंचलिक महायोजना के अनुसार विनियमित होंगे ।
13.	गैर प्रदूषणकारी लघु उद्योग।	फरवरी, 2016 में केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा जारी, समय-समय पर यथा संशोधित उद्योगों में वर्गीकरण के अनुसार गैर-प्रदूषणकारी उद्योग और अपरिसंकटमय, लघु और सेवा उद्योग, कृषि, पुष्प कृषि, बागवानी या पारिस्थितिकी संवेदी जोन से देशी सामग्री से उत्पादों को उत्पन्न करने वाले कृषि आधारित उद्योग सक्षम प्राधिकारी द्वारा अनुज्ञात होंगे।
14.	वृक्षों की कटाई ।	(क) केन्द्र शासित सरकार के सक्षम प्राधिकारी की पूर्व अनुमति के बिना वन भूमि या सरकारी या राजस्व या निजी भूमि पर वृक्षों की कटाई नहीं होगी । (ख) वृक्षों की कटाई केंद्रीय या संबंधित केन्द्र शासित प्रदेश के अधिनियम या उसके अधीन बनाए गए नियमों के उपबंधों के अनुसार विनियमित होगी ।
15.	वन उत्पादों और गैर काष्ठ वन उत्पादों का संग्रहण ।	लागू विधियों के अधीन विनियमित होगा ।
16.	विद्युत और संचार टॉवर लगाने, तार-बिछाने तथा अन्य बुनियादी ढांचे की व्यवस्था ।	लागू विधियों के अधीन विनियमित होगा (भूमिगत केबल बिछाने को बढ़ावा दिया जाएगा)।
17.	नागरिक सुविधाओं सहित बुनियादी ढांचा।	लागू विधियों, नियमों और विनियमनों और उपलब्ध दिशानिर्देशों के अनुसार न्यूनीकरण उपाय किए जाएंगे।
18.	विद्यमान सड़कों को चौड़ा करना, उन्हें सुदृढ बनाना और नई सड़कों का निर्माण।	लागू विधियों, नियमों और विनियमनों और उपलब्ध दिशानिर्देशों के अनुसार न्यूनीकरण उपाय किए जाएंगे।
19.	पहाड़ी ढलानों और नदी तटों का संरक्षण ।	लागू विधियों के अधीन विनियमित होगा ।
20.	रात्रि में वाहन यातायात का संचलन ।	लागू विधियों के अधीन वाणिज्यिक प्रयोजन के लिए विनियमित होगा ।
21.	स्थानीय जनता द्वारा अपनायी जा रही वर्तमान कृषि और बागवानी पद्धतियों के साथ डेयरियां, दुग्ध उत्पादन, जल कृषि और मत्स्य पालन।	स्थानीय जनता के प्रयोग के लिए लागू विधियों के अधीन अनुमत होंगे।

22.	प्राकृतिक जल निकायों या भू क्षेत्र में उपचारित अपशिष्ट जल/ बहिर्स्राव का निस्सरण ।	जल निकायों में उपचारित अपशिष्ट जल/बहिर्स्राव के निस्सरण से बचा जाएगा और उपचारित अपशिष्ट जल के पुनर्चक्रण और पुन:उपयोग के प्रयास किए जाएंगे अन्यथा उपचारित अपशिष्ट जल/बहिर्स्राव का निस्सरण लागू विधियों के अनुसार विनियमित किया जाएगा।
23.	सतही और भूजल का वाणिज्यिक निष्कर्षण ।	लागू विधियों के अधीन विनियमित होगा ।
24.	फर्मों, कारपोरेट और कंपनियों द्वारा बड़े पैमाने पर वाणिज्यिक पशुधन संपदा और कुक्कुट फार्मों की स्थापना ।	स्थानीय आवश्यकताओं को पूरा करने के अलावा लागू विधियों के अधीन विनियमित (अन्यथा किए गए प्रावधान को छोड़कर) होंगे ।
25.	कृषि और अन्य उपयोग के लिए खुले कुंआ, बोर कुंआ, आदि ।	विनियमित एवं उपयुक्त प्राधिकरण द्वारा क्रियाकलापों की सख्ती से निगरानी की जाएगी।
26.	ठोस अपशिष्ट का प्रबंधन।	लागू विधियों के अनुसार विनियमित होगा ।
27.	विदेशी प्रजातियों को लाना।	लागू विधियों के अनुसार विनियमित होगा ।
28.	पारिस्थितिकी पर्यटन।	लागू विधियों के अनुसार विनियमित होगा ।
29.	वाणिज्यिक संकेत बोर्ड और होर्डिंग का प्रयोग ।	लागू विधियों के अनुसार विनियमित होगा ।
	ग. संवर्धित क्रियाकलाप	
30.	वर्षा जल संचय ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
31.	जैविक खेती।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
32.	सभी गतिविधियों के लिए हरित प्रौद्योगिकी का अंगीकरण ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
33.	ग्रामीण कारीगरों सहित कुटीर उद्योग आदि।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
34.	नवीकरणीय ऊर्जा और ईंधन का प्रयोग ।	बायोगैस, सौर प्रकाश इत्यादि को सक्रिय बढ़ावा दिया जाएगा।
35.	कृषि वानिकी ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
36.	बागान लगाना और जड़ी बूटियों का रोपण ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
37.	पारिस्थितिकी के अनुकूल यातायात का प्रयोग ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
38.	कौशल विकास ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
39.	अवक्रमित भूमि/वनों/ पर्यावासों की बहाली ।	सक्रिय रूप से बढ़ावा दिया जाएगा ।
40.	पर्यावरण के प्रति जागरुकता।	सक्रिय रूप से बढ़ावा दिया जाएगा ।

5. पारिस्थितिकी-संवेदी जोन अधिसूचना की निगरानी के लिए निगरानी समिति- पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उपधारा (3) के तहत इस अधिसूचना के उपबंधों की प्रभावी निगरानी के लिए केन्द्रीय सरकार एतद्द्वारा निम्नलिखित को शामिल करके एक निगरानी समिति का गठन करती है, अर्थात्:-

क्र.स.	निगरानी समिति का गठन	पद
1.	उपायुक्त, बारामूला	अध्यक्ष;
2.	जम्मू और कश्मीर सरकार द्वारा नामित किए जाने वाले पारिस्थितिकी और पर्यावरण के क्षेत्र के एक विशेषज्ञ	सदस्य;
3.	जम्मू-कश्मीर सरकार द्वारा नामित पर्यावरण संरक्षण के क्षेत्र में काम करने वाले एक गैर-सरकारी संगठन का एक प्रतिनिधि	सदस्य;
4.	जम्मू और कश्मीर जैव विविधिता परिषद् का प्रतिनिधि	सदस्य;
5.	जिला अधिकारी, जम्मू और कश्मीर राज्य प्रदूषण नियंत्रण बोर्ड, बारामूला	सदस्य;
6.	प्रमंडलीय वनाधिकारी, झेलम घाटी वन प्रमंडल	सदस्य;
7.	प्रमंडलीय वनाधिकारी, लंगेट वन प्रमंडल	सदस्य;
8.	वन्यजीव वार्डन, उत्तर प्रमंडल	सदस्य-सचिव

6. विचारार्थ विषय:- (1) निगरानी समिति इस अधिसूचना के उपबंधों के अनुपालन की निगरानी करेगी।

(2) निगरानी समिति का कार्यकाल अगले आदेश होने तक होगा, परंतु यह कि समिति के गैर-सरकारी सदस्यों को समय-समय पर केन्द्र शासित सरकार द्वारा मनोनीत किया जाएगा।

(3) ऐसे कार्यकलापों, जो भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ), तारीख 14 सितंबर, 2006 की अनुसूची में सम्मिलित हैं और पारिस्थितिकी संवेदी जोन में आ रहे हैं, इस अधिसूचना के पैराग्राफ 4 के अधीन सारणी में यथाविनिर्दिष्ट प्रतिषिद्ध गतिविधियों के सिवाय, की वास्तविक विनिर्दिष्ट स्थलीय दशाओं के आधार पर निगरानी समिति द्वारा संवीक्षा की जाएगी और उक्त अधिसूचना के उपबंधों के अधीन पूर्व पर्यावरण अनापत्ति लेने के लिए केन्द्रीय सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को निर्दिष्ट की जाएंगी।

(4) इस अधिसूचना के पैरा 4 के अधीन सारणी में यथा विनिर्दिष्ट प्रतिषिद्ध क्रियाकलापों के सिवाय, ऐसे क्रियाकलापों जिन्हें भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना संख्या का.आ. 1533(अ), तारीख 14 सितंबर, 2006 की अधिसूचना के अनुसूची में सम्मिलित नहीं किया गया है, परंतु जो पारिस्थितिकी संवेदी जोन में आ रहे हैं, की वास्तविक विनिर्दिष्ट स्थलीय दशाओं के आधार पर निगरानी समिति द्वारा संवीक्षा की जाएगी और उसे संबद्ध विनियामक प्राधिकरणों को निर्दिष्ट किया जाएगा ।

(5) निगरानी समिति का सदस्य-सचिव या संबंधित उपायुक्त ऐसे व्यक्ति के विरूद्ध, जो इस अधिसूचना के उपबंधों का उल्लंघन करता है, पर्यावरण अधिनियम की धारा 19 के अधीन परिवाद दायर करने के लिए सक्षम होगा।

(6) निगरानी समिति संबंधित विभागों के प्रतिनिधियों या विशेषज्ञों, औद्योगिक संघों के प्रतिनिधियों या संबंधित हितधारकों को, प्रत्येक मामले मे आवश्यकता के अनुसार, अपने विचार-विमर्श में सहायता के लिए आमंत्रित कर सकेगी ।

(7) निगरानी समिति प्रत्येक वर्ष 31 मार्च की स्थिति के अनुसार अपनी वार्षिक कार्रवाई रिपोर्ट केंद्र शासित प्रदेश के मुख्य वन्यजीव वार्डन को, **अनुलग्नक V** में दिए गए प्रपत्र के अनुसार, उस वर्ष की 30 जून तक प्रस्तुत करेगी ।

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

7. अतिरिक्त उपाय.- इस अधिसूचना के उपबंधों को प्रभावी बनाने के लिए केंद्रीय सरकार और केंद्र शासित प्रदेश की सरकार, अतिरिक्त उपाय, यदि कोई हों, विनिर्दिष्ट कर सकेंगी ।

8. उच्चतम न्यायालय, आदि के आदेश.- 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 अध्यधीन होंगे ।

[फा. सं. 25/14/2020-ईएसजेड]

डॉ. सतीश चन्द्र गढ़कोटी, वैज्ञानिक 'जी'

अनुलग्नक- I

केंद्र शासित क्षेत्र जम्मू एवं कश्मीर में काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य और लचीपोरा वन्यजीव अभयारण्य और इसके पारिस्थितिकी संवेदी जोन की सीमा का विवरण

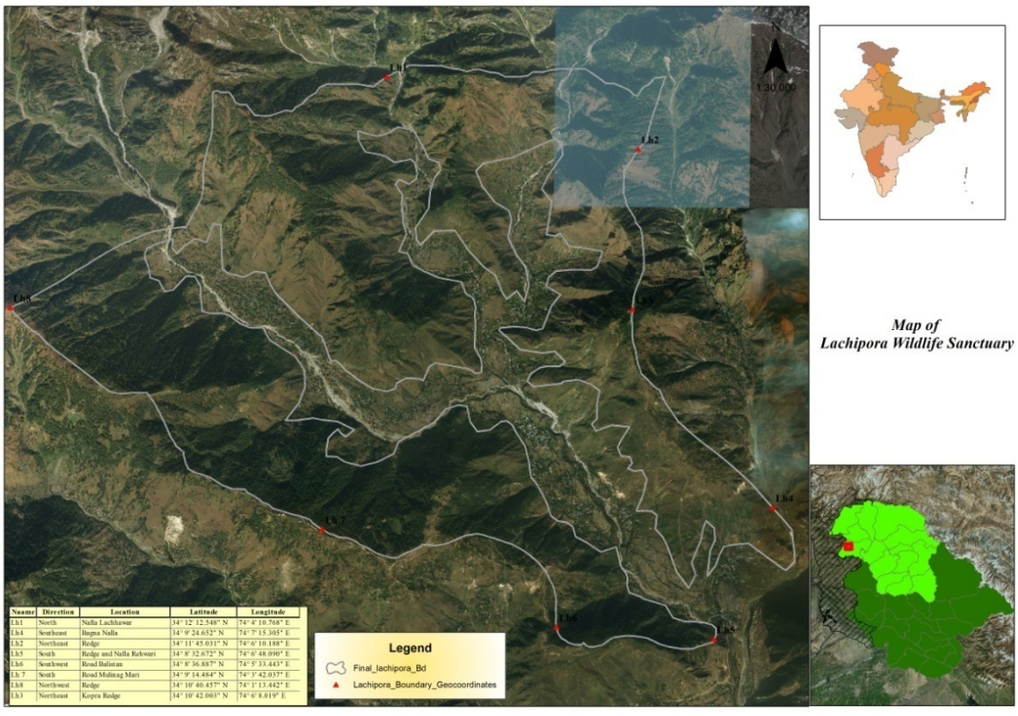
बिंदु	देशांतर	अक्षांश	दूरी	टिप्पणी
1	74° 5' 38.681" पू	34° 15' 6.329" उ	50 मीटर	वन क्षेत्र, द्वारा /26 आरएफडी
2	74° 6' 13.591" पू	34° 15' 21.786" उ	1000 मीटर	वन क्षेत्र, खुली झाडी, द्वारा /25 आरएफडी
3	74° 9' 41.404" पू	34° 14' 33.668" उ	1000 मीटर	वन क्षेत्र, द्वारा / 21 आरएफडी, खुली झाडी
4	74° 11' 0.690" पू	34° 14' 0.771" उ	1000 मीटर	वन क्षेत्र, द्वारा 20 आरएफडी
5	74° 14' 12.003" पू	34° 14' 25.858" उ	1000 मीटर	वन क्षेत्र, द्वारा/ 16 आरएफडी
6	74° 14' 48.264" पू	34° 13' 40.732" उ	1000 मीटर	चिट्टे बतीन, वन क्षेत्र
7	74° 14' 4.618" पू	34° 13' 3.929" उ	50 मीटर	वन क्षेत्र, कावा पहाड़ी
8	74° 12' 58.892" पू	34° 11' 50.569" उ	1000 मीटर	हीलन ग्राम
9	74° 12' 18.447" पू	34° 11' 13.076" उ	2000 मीटर	वन क्षेत्र, जेवी दीवन, काथा नार
10	74° 11' 58.364" पू	34° 10' 26.987" उ	1500 मीटर	वन क्षेत्र, डिंडवारा ग्राम
11	74° 11' 59.366" पू	34° 9' 14.534" उ	50 मीटर	प्रीन्गल, झेलम ग्राम
12	74° 10' 26.288" पू	34° 8' 36.733" उ	1500 मीटर	उपल्हाक मार्ग, वन क्षेत्र
13	74° 9' 4.215" पू	34° 9' 29.800" उ	1500 मीटर	तवरइन वन क्षेत्र
14	74° 8' 12.285" पू	34° 10' 47.517" उ	1500 मीटर	वन क्षेत्र
15	74° 7' 22.080" पू	34° 11' 35.330" उ	5000 मीटर	वन क्षेत्र, इशमाबाद नाला
16	74° 7' 10.332" पू	34° 10' 57.357" उ	3000 मीटर	बगना नाला, वन क्षेत्र
17	74° 7' 30.230" पू	34° 10' 8.319" उ	3000 मीटर	इस्लामबाद,बगना ग्राम एवं वन क्षेत्र
18	74° 7' 39.132" पू	34° 9' 15.311" उ	500 मीटर	बगना नार
19	74° 6' 10.275" पू	34° 8' 32.096" उ	50 मीटर	वन क्षेत्र
20	74° 4' 58.183" पू	34° 9' 11.289" उ	50 मीटर	वन क्षेत्र
21	74° 3' 4.736" पू	34° 9' 27.929" उ	50 मीटर	वन क्षेत्र
22	74° 2' 34.129" पू	34° 9' 43.573" उ	50मीटर	वन क्षेत्र
23	74° 2' 17.347" पू	34° 10' 5.887" उ	50 मीटर	वन क्षेत्र
24	74° 1' 11.906" पू	34° 10' 39.053" उ	50 मीटर	वन क्षेत्र
25	74° 0' 16.650" पू	34° 11' 21.498" उ	50 मीटर	वन क्षेत्र
26	73° 59' 52.862" पू	34° 11' 38.957" उ	50 मीटर	वन क्षेत्र

29	74° 0' 9.615" पू	34° 13' 8.461" उ	50 मीटर	वन क्षेत्र
30	74° 0' 47.853" पू	34° 13' 19.283" उ	50 मीटर	वन क्षेत्र
33	74° 1' 43.414" पू	34° 14' 1.310" उ	50 मीटर	वन क्षेत्र
37	74° 3' 42.507" पू	34° 15' 47.506" उ	50 मीटर	वन क्षेत्र, द्वारा 31/ आरएफडी
27	73° 59' 47.024" पू	34° 12' 35.036" उ	50 मीटर	वन क्षेत्र
28	74° 0' 0.110" पू	34° 12' 54.794" उ	50 मीटर	वन क्षेत्र
29	74° 0' 22.943" पू	34° 13' 20.318" उ	50 मीटर	वन क्षेत्र
31	74° 1' 1.870" पू	34° 13' 23.833" उ	50 मीटर	वन क्षेत्र
32	74° 1' 31.712" पू	34° 13' 45.728" उ	50मीटर	वन क्षेत्र
34	74° 1' 20.600" पू	34° 14' 21.236" उ	50 मीटर	वन क्षेत्र, सीध कनूशाह
34	74° 1' 28.929" पू	34° 14' 44.601" उ	50 मीटर	वन क्षेत्र
35	74° 2' 19.213" पू	34° 15' 34.140" उ	50 मीटर	वन क्षेत्र, द्वारा 31/ आरएफडी
38	74° 4' 3.486" पू	34° 15' 50.648" उ		वन क्षेत्र, खुली झाडी
39	74° 4' 39.748" पू	34° 15' 19.869" उ	50 मीटर	वन क्षेत्र, द्वारा 26/ आरएफडी
40	74° 5' 17.733" पू	34° 15' 21.806" उ	50 मीटर	वन क्षेत्र, खुली झाडी

अनुलग्नक-II क

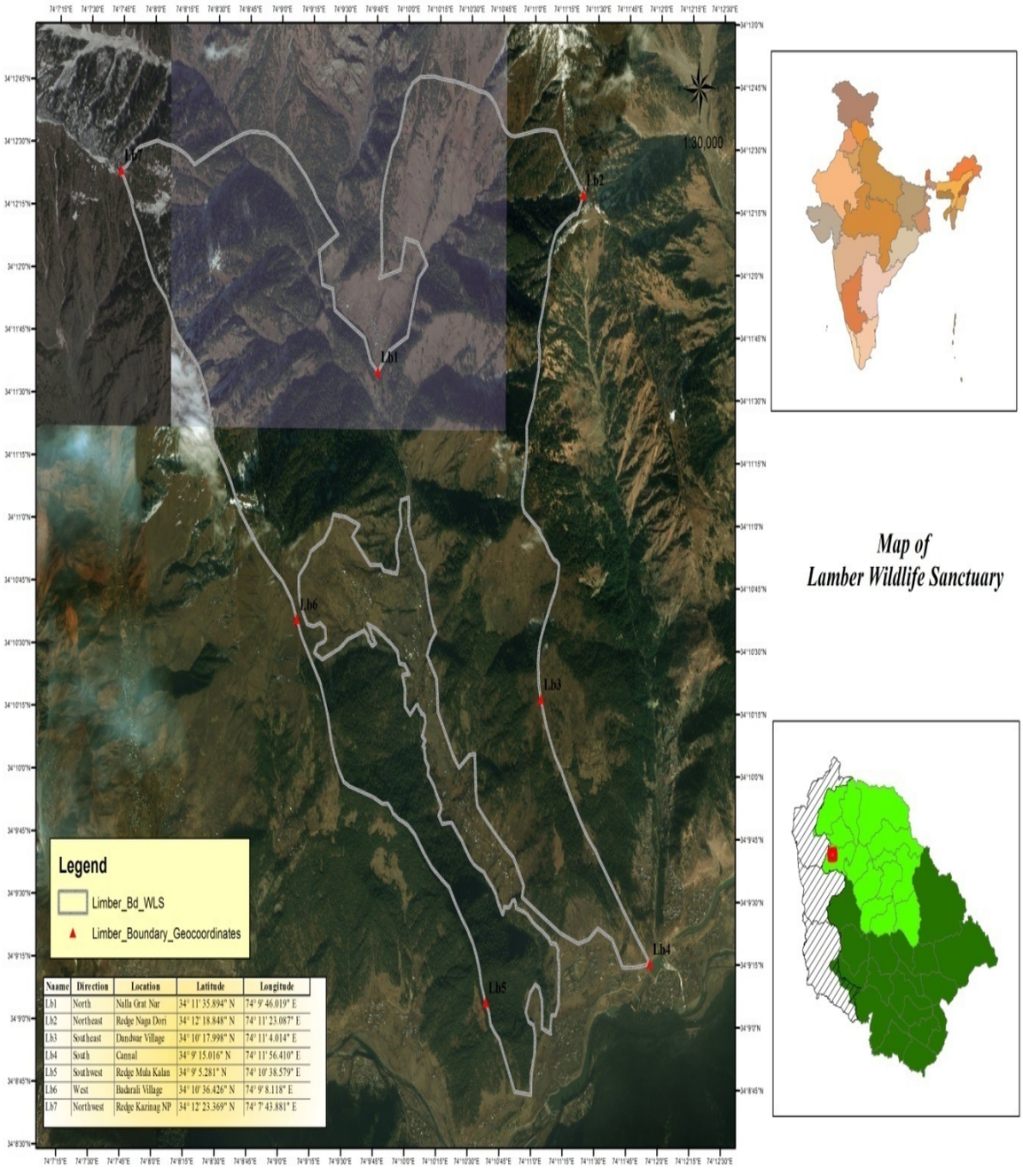
मुख्य अवस्थानों के अक्षांश और देशांतर के साथ काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन के अवस्थान मानचित्र





Name	Direction	Location	Latitude	Longitude
Lh1	North	Nalla Lachhawar	34° 12' 12.548" N	74° 4' 10.768" E
Lh4	Southeast	Bagna Nalla	34° 9' 24.652" N	74° 7' 15.395" E
Lh2	Northeast	Ridge	34° 11' 45.031" N	74° 6' 10.188" E
Lh3	South	Ridge and Nalla Rehwari	34° 8' 32.672" N	74° 6' 48.090" E
Lh6	Southwest	Road Balistan	34° 8' 36.887" N	74° 5' 33.443" E
Lh 7	South	Road Mulinag Mari	34° 9' 14.484" N	74° 3' 42.037" E
Lh8	Northwest	Ridge	34° 10' 46.457" N	74° 1' 13.442" E
Lh5	Northeast	Kopra Ridge	34° 10' 42.003" N	74° 6' 8.019" E

Map of
Lachipora Wildlife Sanctuary

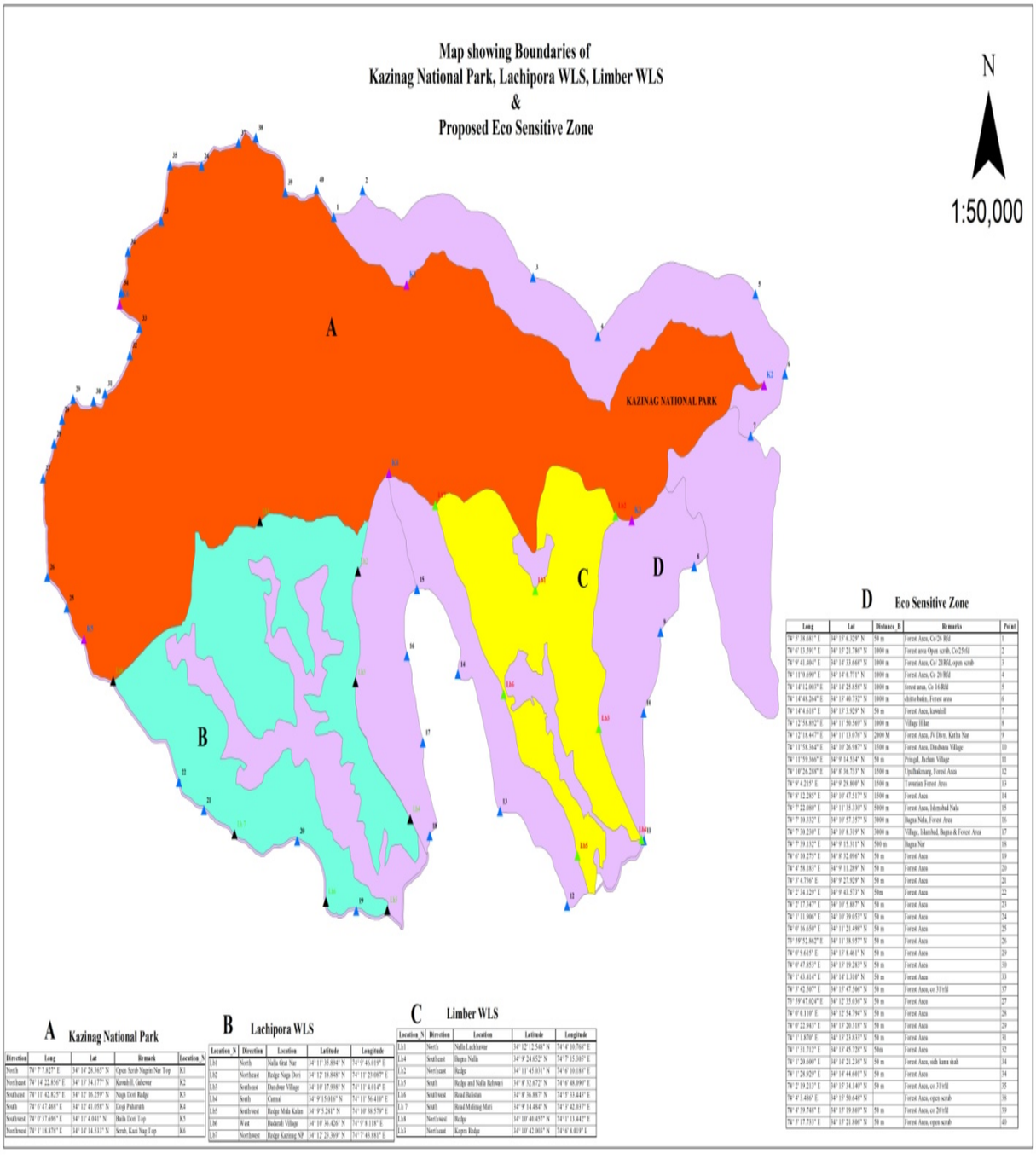


Name	Direction	Location	Latitude	Longitude
Lb1	North	Nalla Grat Nar	34° 11' 35.894" N	74° 9' 46.019" E
Lb2	Northeast	Redge Naga Dori	34° 12' 18.848" N	74° 11' 23.087" E
Lb3	Southeast	Dandwar Village	34° 10' 17.998" N	74° 11' 4.014" E
Lb4	South	Cannal	34° 9' 15.016" N	74° 11' 56.410" E
Lb5	Southwest	Redge Mula Kalan	34° 9' 5.281" N	74° 10' 38.579" E
Lb6	West	Badarali Village	34° 10' 36.426" N	74° 9' 8.118" E
Lb7	Northwest	Redge Kazinag NP	34° 12' 23.369" N	74° 7' 43.881" E

Map of
Lamber Wildlife Sanctuary

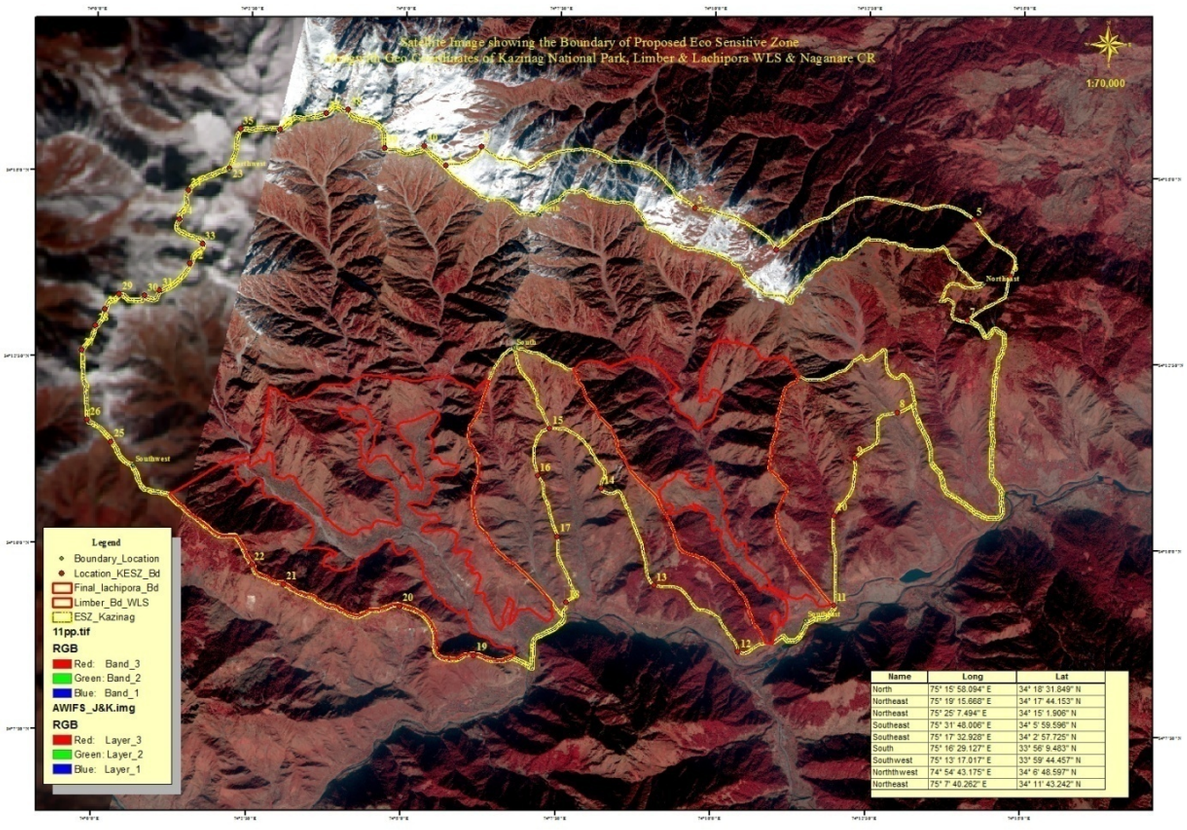
अनुलग्नक-II ख

मुख्य अवस्थानों के अक्षांश और देशांतर के साथ काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन की सीमाओं को दर्शाने वाला मानचित्र



अनुलग्नक-II ग

मुख्य अवस्थानों के अक्षांश और देशांतर के साथ काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन का सैटैलाइट मानचित्र



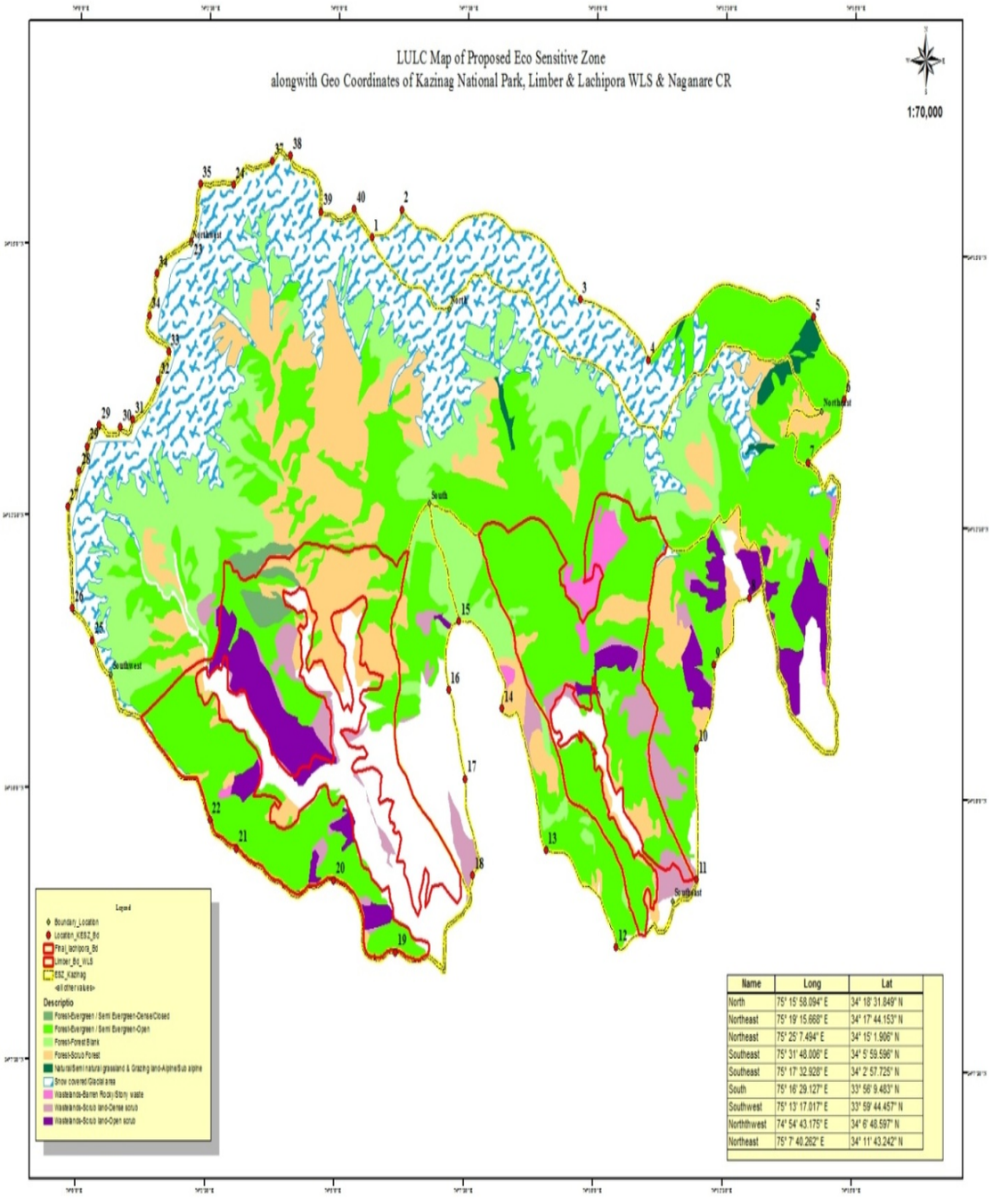
अनुलग्नक-II घ

मुख्य अवस्थानों के अक्षांश और देशांतर के साथ काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन का मानचित्र



अनुलग्नक-II ङ

काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन का भूमि उपयोग भूमि कवर मानचित्र



अनुलग्नक-III

क. काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के संरक्षित क्षेत्र के भू-निर्देशांक को दर्शाने वाली सारणी

काज़िनाग राष्ट्रीय उद्यान				
नाम	**दिशा**	**अवस्थान**	**अक्षांश**	**देशांतर**
के1	उत्तर	खुली झाड़ी नागरीन नार टॉप	34⁰ 14’ 28.365” उ	74⁰ 7’ 7.827” पू
के2	उत्तर-पूर्व	कावा पहाड़ी, गबेवार	34⁰ 13’ 34.177” उ	74⁰ 14’ 22.856” पू
के3	दक्षिण-पूर्व	नागा डोरी रीज़	34⁰ 12’ 16.259” उ	74⁰ 11’ 42.825” पू
के4	दक्षिण	डोगी पहारूथ	34⁰ 12’ 41.058” उ	74⁰ 6’ 47.468” पू
के5	दक्षिण-पश्चिम	बइला डोरी टॉप	34⁰ 11’ 4.041” उ	74⁰ 0’ 37.696” पू
के6	उत्तर-पश्चिम	स्क्रब, काजी नाग टॉप	34⁰ 14’ 14.533” उ	74⁰ 1’ 18.878” पू
लचीपोरा वन्यजीव अभयारण्य				
नाम	**दिशा**	**अवस्थान**	**अक्षांश**	**देशांतर**
एलएच1	उत्तर	नाल्ला लछावर	34⁰ 12’ 12.548” उ	74⁰ 4’ 10.768” पू
एलएच4	दक्षिण-पूर्व	बगना नाल्ला	34⁰ 9’ 24.652” उ	74⁰ 7’ 15.305” पू
एलएच2	उत्तर-पूर्व	रिज़	34⁰ 11’ 45.031” उ	74⁰ 6’ 10.188” पू
एलएच5	दक्षिण	रिज़ और नाल्ला रेहवारी	34⁰ 8’ 32.672” उ	74⁰ 6’ 48.090” पू
एलएच6	दक्षिण-पश्चिम	सड़क बलिस्तान	34⁰ 8’ 36.887” उ	74⁰ 5’ 33.443” पू
एलएच7	दक्षिण	सड़क मुलिनाग मारी	34⁰ 9’ 14.484” उ	74⁰ 3’ 42.037” पू
एलएच8	उत्तर-पश्चिम	रिज़	34⁰ 10’ 40.457” उ	74⁰ 1’ 13.442” पू
एलएच3	उत्तर-पूर्व	कोपरा रिज़	34⁰ 10’ 42.003” उ	74⁰ 6’ 8.019” पू
लीम्बर वन्यजीव अभयारण्य				
नाम	**दिशा**	**अवस्थान**	**अक्षांश**	**देशांतर**
एलबी1	उत्तर	नाल्ल गरात नार	34⁰ 11’ 35.894” उ	74⁰ 9’ 46.019” पू
एलबी2	उत्तर-पूर्व	रीज़ नागा डोरी	34⁰ 12’ 18.848” उ	74⁰ 11’ 23.087” पू
एलबी3	दक्षिण-पूर्व	डांडवार ग्राम	34⁰ 10’ 17.998” उ	74⁰ 11’ 4.014” पू
एलबी4	दक्षिण	कैन्नाल	34⁰ 9’ 15.016” उ	74⁰ 11’ 56.410” पू
एलबी5	दक्षिण-पश्चिम	रीज़ मुला कलान	34⁰ 9’ 5.281” उ	74⁰ 10’ 38.579” पू
एलबी6	पश्चिम	बदराली ग्राम	34⁰ 10’ 36.426” उ	74⁰ 9’ 8.118” पू
एलबी7	उत्तर-पश्चिम	रीज़ काज़िनाग एनपी	34⁰ 12’ 23.369” उ	74⁰ 7’ 43.881” पू

ख. काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य की सीमाओं के पारिस्थितिकी संवेदी जोन के भू-निर्देशांक को दर्शाने वाली सारणी

दिशा	सीमा विवरण	अक्षांश(उ)	देशांतर (पू)
उत्तर	कुदबनी वन क्षेत्र	34° 14' 33.668"उ	74° 9' 41.404"पू
उत्तर-पूर्व	चिट्टे बातिन वन क्षेत्र	34° 13' 40.732"उ	74° 14' 48.264"पू
पूर्व	गब्बेवार क्षेत्र	34° 13' 1 3.929"उ	74° 14' 4.618"पू
दक्षिण-पूर्व	काथा नाल्लाह क्षेत्र	34⁰ 10' 26.987''उ	74⁰ 11' 58.364''पू
दक्षिण	थाथला मुला क्षेत्र	34 ⁰ 8' 36.733''उ	74⁰ 10' 26.288''पू
दक्षिण-पश्चिम	लोइपहाटका छाम्ब क्षेत्र	34⁰ 11' 21.498''उ	74⁰ 0' 16.650''पू
पश्चिम	गराजा गली क्षेत्र	34 ⁰ 13' 8.461''उ	74 ⁰ 0' 9.615''पू
उत्तर-पश्चिम	काज़िनाग क्षेत्र	34⁰ 15' 34.140''उ	74⁰ 2' 19.213''पू

अनुलग्नक-IV

भू-निर्देशांकों के साथ काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के पारिस्थितिकी संवेदी जोन के अंतर्गत आने वाले ग्रामों की सूची

काज़िनाग राष्ट्रीय उद्यान, लीम्बर वन्यजीव अभयारण्य एवं लचीपोरा वन्यजीव अभयारण्य के प्रस्तावित पारिस्थितिकी संवेदी जोन के अंतर्गत निम्नलिखित अट्ठारह ग्राम/नगर क्षेत्र आते हैं:

क्र.सं.	ग्राम	तहसील	जिला	अक्षांश	देशांतर
1.	बगना	बोनियार	बारामूला	34°10'29.171"उ	74° 6'43.904"पू
2.	कोपरा	बोनियार	बारामूला	34°10'43.999"उ	74° 6'13.486"पू
3.	कथ बेख	बोनियार	बारामूला	34°1'15.935"उ	74° 6'39.197"पू
4.	नागा पाथरी	बोनियार	बारामूला	34°12' 2.669"उ	74° 6'30.519"पू
5.	इस्लामाबाद	बोनियार	बारामूला	34°10' 2.536"उ	74° 7'21.262"पू
6.	बुजानथाल	बोनियार	बारामूला	34° 9' 47.050"उ	74° 9' 7.755"पू
7.	नाल्ला	बोनियार	बारामूला	34° 9' 35.054"उ	74° 10'2.232"पू
8.	उपलहाकीमार्ग	बोनियार	बारामूला	34° 8' 41.100"उ	74°10'39.331"पू
9.	नौगीरान	बोनियार	बारामूला	34° 8' 50.221"उ	74° 11' 7.345"पू
10.	दंडवारा	बोनियार	बारामूला	34°10'30.316"उ	74°11'11.034"पू
11	पिहरान	बोनियार	बारामूला	34° 9' 45.737"उ	74°11'57.188"पू
12.	काहा बहाक	बोनियार	बारामूला	34°11'29.712"उ	74°11'30.105"पू
13.	हिल्लान	बोनियार	बारामूला	34°11'58.575"उ	74°12'49.433"पू
12.	बुगना	बोनियार	बारामूला	34° 9' 47.460"उ	74° 7' 17.499"पू
13.	थट मुल्ला खान	बोनियार	बारामूला	34° 9' 5.449"उ	74° 10' 9.346"पू

14.	गब्बेवार	बोनियार	बारामूला	34°13'26.507"उ	74°13'55.534"पू
15.	चिट्टे बाटिन	बोनियार	बारामूला	34°13'27.679"उ	74°14'29.857"पू
16.	तुंड बहक	बोनियार	बारामूला	34°14'32.527"उ	74°13'25.312"पू
17.	पहलीपूरा	बोनियार	बारामूला	34°14'35.803"उ	74°13'16.337"पू
18.	काथा	बोनियार	बारामूला	34°10'47.679"उ	74° 12' 2.444"पू

अनुलग्नक-V

की गई कार्रवाई संबंधी रिपोर्ट का प्रपत्रः

1. बैठकों की संख्या और तारीख ।
2. बैठकों का कार्यवृत : (कृपया मुख्य उल्लेखनीय बिंदुओं का वर्णन करें । बैठक के कार्यवृत को एक पृथक अनुलग्नक 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 अनुलग्नक के रुप में संलग्न करें।
5. पर्यावरण प्रभाव आकलन अधिसूचना, 2006 के अधीन आने वाली गतिविधियों से संबंधित संवीक्षा किए गए मामलों का सार।(विवरण एक पृथक अनुलग्नक के रूप में संलग्न करें)।
6. पर्यावरण प्रभाव आकलन अधिसूचना, 2006 के अधीन न आने वाली गतिविधियों से संबंधित संवीक्षा किए गए मामलों का सार । (विवरण एक पृथक अनुलग्नक 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 7th June, 2021

S.O 2180(E).—The following draft notification, which the Central Government proposes to issue in exercise of the powers conferred by sub-section (1), read with clause (v) and clause (xiv) of sub-section (2) and sub-section (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) is hereby published, as required under sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, for the information of the public likely to be affected thereby; and notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of sixty days from the date on which copies of the Gazette containing this notification are made available to the public;

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may forward the same in writing, for consideration of the Central Government within the period so specified to the Secretary, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi-110 003, or send it to the e-mail address of the Ministry at esz-mef@nic.in.

DRAFT NOTIFICATION

WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary are spread over the total area of 181 square kilometres in Jammu province, Jammu and Kashmir.

AND WHEREAS, the Kazinag National Park comprising an area of 89.00 square kilometres has been notified as National Park vide notification no. S.R.O. No: 425 dated 18th December, 2007. Limber Wildlife Sanctuary comprising an area of 12 square kilometres has been notified as Wildlife Sanctuary vide S.R.O. No: 157 dated 19th March 1987 and Lachipora Wildlife Sanctuary comprising an area of 80.00 square kilometres has been notified as Wildlife Sanctuary notified vide S.R.O. No: 150 dated 19th March 1987.

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary, and Lachipora Wildlife Sanctuary form the most important natural heritage representing a great bio-diversity of flora and fauna. The area is known to harbour the last viable population of Pir Panjal Markhor *(Capra falconeri)* and endemic Kashmir musk deer (*Moschus cupreus*). The area provides pristine locations for nature lovers, bird watchers, mountaineers, ecologists, researchers and tourists.

AND WHEREAS, the physiographical and topographical terrain of the area supports a mesophytic vegetation of temperate conifers arranged in an altitudinal sequence and a variety of forest types, lush green meadows of alpine habitats makes it more unique for such a biological and ecological heritage and therefore, calls upon its effective conservation, preservation and better propagation of wildlife species in order to protect it for future generations.

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary consists of coniferous forests with deodar wood cover, blue pine forests, silver fir canopy, broad-leaved woodland, birch forest, isoden scrub, savana scrub and alpine pastures. The area also has a diversity of faunal species such as Deodar (*Cedrus deodara*), Parrotia (*Parrotiopsis jacquemontiana*), kail (*Pinus walllichina),* fir (*Abies Pindrow*), spruce (*Picea smithiana*), horse chestnut (*Aesculus indica*), walnut (*Juglans regia*), *Acer cappadocicum*, *Betula utilis*, *Indigofera heterantha*, Viburnum grandiflorum,*Rosa webbiana*, *Lonicera quinquelocularis*, chinar (*Platanus orientalis*), *Juniperus recurva*, *Rhododendron anthopogon*, *Isodon rugosus*, *Pinus griffithii* etc.

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary, Lachipora Wildlife Sanctuary and Naganari Conservation Reserve fall in the North-West Himalayan province of Himalayan zone as per the bio-geographic demarcation of Jammu and Kashmir State by Rodgers and Pawar (1988). The faunal life is distinguished by the presence of many species of Indo-Chinese forms. The faunal elements show affinities with Northern Paleartic fauna as well as Eastern and Oriental fauna, forming a unique assemblage of great conservation value.

AND WHEREAS, the area has a wide variety of rare, threatened and endangered faunal species such as Asiatic black bear (*Ursus thibetanus)*, Himalayan brown bear (*Ursus arctos)*, common leopard *(Panthera pardus),* leopard cat (*Prionailurus bengalensis),* jungle cat *(Felis chaus)*, red fox *(Vulpes vulpes)*, jackal *(Canis aureus)*, yellow-throated marten *(Martes flavigula)*, mountain weasel *(Mustela altaica)*, Indian porcupine *(Hystrix indica)*, Himalayan grey langur (*Semnopithecus ajax)*, Rhesus macaque *(Macaca mulatta)*, Himalayan grey goral *(Nemorhaedus bedfordi)*, Himalayan palm civet *(Paguma larvata)*, Indian wild pig *(Sus scorfa)*, Royle's pika *(Ochotona roylei)*, house shrew (*Suncus murinus)*, Kashmir flying squirrel (*Eoglaucomys fimbriatus) etc.*

AND WHEREAS, the Kazinag National Park, Limber Wildlife Sanctuary, Lachipora Wildlife Sanctuary are home to 120 species of birds representing about 36 families. Some of the birds species present in the area are Himalayan griffon (*Gypsy himalayensis)*, bearded vulture *(Gypaetus barbatus)*, western tragopan *(Tragopan melanocephalus)*, cheer pheasant (*Catreus wallichii)*, Himalayan monal (*Lophophorus impejanus)*, koklass pheasant (*Pucrasia macrolopha)*, large-spotted nutcracker *(Nucifraga multipunctata)*, red-billed chough *(Pyrrhocorax pyrrhocorax)*, grey-headed canary flycatcher (*Culicicapa ceylonensis)*, Kashmir nuthatch *(Sitta cashmirensis)*, rock bunting *(Emberiza cia) etc*.

AND WHEREAS, it is necessary to conserve and protect the area, the extent and boundaries of Kazinag National Park, Limber Wildlife Sanctuary & Lachipora 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-sections (2) and (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 5 kilometers around the boundary of Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary, in the Union Territory of Jammu & Kashmir as Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary 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 of 69.97 square kilometers with an extent 0(zero) to 5 kilometers around the boundary of Kazinag National Park, Limber Wildlife Sanctuary and Lachipora Wildlife Sanctuary. Extent of Eco-sensitive zone in different directions (kilometers) as given below:-

Direction	Extent (kilometres)
North	1.5
North-East	1.5
East	0.05
South-East	5.0
South	0.05
South-West	0.05
West	0.00
North-west	0.00

The zero extent of the Eco-sensitive zone towards West and North-West direction is due to presence of actual Line of Control and also due to human settlements.

(2) The boundary description of Eco-sensitive Zone around Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary is appended as **Annexure-I.**

(3) The maps of the Kazinag National Park, Limber Wildlife Sanctuary & Lachipora 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-IIE.**

(4) Lists of geo co-ordinates of the boundary of Kazinag National Park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary and Eco-Sensitive Zone are given in Table **A** and Table **B** of **Annexure-III.**

(5) The list of village falling in the Eco-sensitive Zone along with their geo co-ordinates at prominent points is appended as **Annexure-IV.**

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 in the 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 & Flood Control;

(ix) 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) above, 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 in 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 Tourism Master Plan shall be prepared by the Union Territory Department of Tourism in consultation with the 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 kilometer 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 the 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 carried out 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 carried out in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the rules made there under.

(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 there under or standards stipulated by the 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 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 incompliance with applicable laws and efforts shall be made for use of cleaner fuels.

(16) Industrial units.– (a) 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.

(b) 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, as amended from time to time 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 there under including the Coastal Regulation Zone, 2011 and 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

S. No.	Activity	Description
	A. Prohibited Activities	
1.	Commercial mining, stone quarrying and crushing units.	(a) All new and existing mining (minor and major minerals), stone quarrying and crushing units shall be 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 within Eco- sensitive Zone; (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.
2.	Setting of industries causing pollution (Water, Air, Soil, Noise, etc.).	New industries and expansion of existing polluting industries in the Eco-sensitive Zone shall not be permitted: 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, as amended from time to time, unless so specified in this notification and in addition, the non-polluting cottage industries shall be promoted.
3.	Establishment of major hydroelectric project.	Prohibited .
4.	Use or production or processing of any hazardous substance.	Prohibited.
5.	Discharge of untreated effluents in natural water bodies or land area.	Prohibited.
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.
8.	Commercial use of firewood.	Prohibited.
9.	Use of polythene bags.	Prohibited .
10.	Undertaking activities related to tourism like over-flying the national park area by aircraft, hot-air balloons.	Prohibited .

B. Regulated Activities		
11.	Commercial establishment of hotels and resorts.	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: Provided that, beyond one kilometer from the 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.
12.	Construction activities.	(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: Provided that, local people shall be permitted to undertake construction in their land for their use including the activities listed in sub-paragraph (1) of paragraph 3 as per building bye-laws to meet the residential needs of the local residents: Provided 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. (b) Beyond one kilometer it shall be regulated as per the Zonal Master Plan.
13.	Small scale non polluting industries.	Non polluting industries as per classification of industries issued by the Central Pollution Control Board in February, 2016, as amended from time to time, 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.
14.	Felling of trees.	(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. (b)The felling of trees shall be regulated in accordance with the provisions of the concerned Central or State Act and the rules made there under.
15.	Collection of Forest Produce or Non-Timber Forest Produce.	Regulated under applicable laws.
16.	Erection of electrical and communication towers and laying of cables and other infrastructures.	Regulated under applicable laws of underground cabling may be promoted.
17.	Infrastructure including civic amenities.	Taking measures of mitigation, as per applicable laws, rules, regulation and available guidelines.
18.	Widening and strengthening of existing roads and construction of new roads.	Taking measures of mitigation, as per applicable laws, rules, regulation and available guidelines.

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.	Discharge of treated waste water/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/effluent shall be regulated as per the applicable laws.
23.	Commercial extraction of surface and ground water.	Regulated under applicable laws.
24.	Establishment of large-scale commercial livestock and poultry farms by firms, corporate and companies.	Regulated (except as otherwise provided) as per applicable laws except for meeting local needs.
25.	Open Well, Bore Well, etc. for agriculture or other usage.	Regulated and the activity should be strictly monitored by the appropriate authority.
26.	Solid Waste Management.	Regulated as per the applicable laws.
27.	Introduction of Exotic species.	Regulated as per the applicable laws.
28.	Eco-tourism.	Regulated as per the applicable laws.
29.	Commercial Sign boards and hoardings.	Regulated as per the applicable laws.
	C. Promoted Activities	
30.	Rain water harvesting.	Shall be actively promoted.
31.	Organic farming.	Shall be actively promoted.
32.	Adoption of green technology for all activities.	Shall be actively promoted.
33.	Cottage industries including village artisans, etc.	Shall be actively promoted.
34.	Use of renewable energy and fuels.	Bio-gas, solar light etc. shall be actively promoted.
35.	Agro-Forestry.	Shall be actively promoted.
36.	Plantation of Horticulture and Herbals.	Shall be actively promoted.
37.	Use of eco-friendly transport.	Shall be actively promoted.
38.	Skill Development.	Shall be actively promoted.
39.	Restoration of Degraded Land/ Forests/ Habitat.	Shall be actively promoted.
40.	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: -

S.No.	Constituent of the Monitoring Committee	Designation
1.	Deputy Commissioner, Baramulla	Chairman;
2.	An expert in the area of ecology and environment to be nominated by the Government of Jammu and Kashmir	Member;
3.	One representative of a Non-Governmental Organization working in the field of environment conservation to be nominated by the Government of Jammu and Kashmir	Member;
4.	Representative of Jammu and Kashmir Biodiversity Council	Member;
5.	District Officer, Jammu and Kashmir State Pollution Control Board, Baramulla	Member;
6.	Divisional Forest Officer, Jhelum Valley Forest Division	Member;
7.	Divisional Forest Officer, Langate Forest Division	Member;
8.	Wildlife Warden, North Division	Member Secretary

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

(2) The tenure of the Monitoring committee shall be till further orders, provided that the non-official members of the Committee shall be nominated by the Union Territory Government from time to time.

(3) 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.

(4) 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.

(5) 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.

(6) 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.

(7) 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 performa appended at **Annexure-V**.

(8) 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. Additional measures.-The Central Government and Union Territory Government may specify additional measures, if any, for giving effect to provisions of this notification.

8. Supreme Court, etc. orders.- 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. 25/14/2020-ESZ]

DR. SATISH C. GARKOTI, Scientist 'G'

ANNEXURE- I

BOUNDARY DESCRIPTION OF ECO-SENSITIVE ZONE AROUND KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY IN THE UNION TERRITORY OF JAMMU & KASHMIR

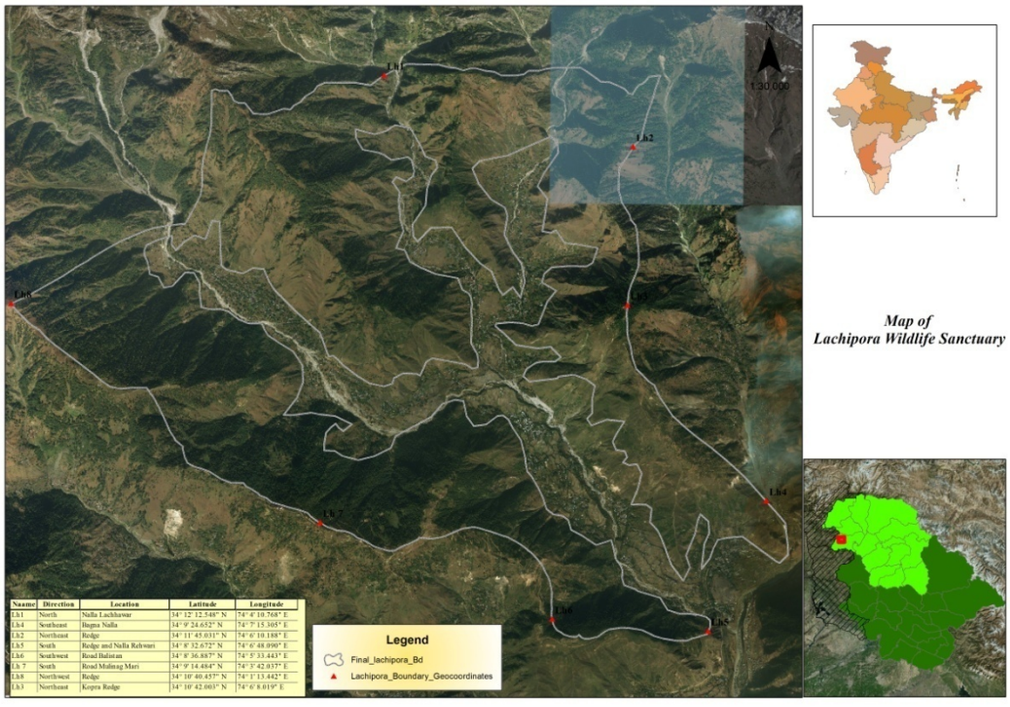
Point	Longitude	Latitude	Distance	Remarks
1	74° 5' 38.681" E	34° 15' 6.329" N	50 m	Forest Area, Co/26 Rfd
2	74° 6' 13.591" E	34° 15' 21.786" N	1000 m	Forest area Open scrub, Co/25rfd
3	74° 9' 41.404" E	34° 14' 33.668" N	1000 m	Forest Area, Co/ 21Rfd, open scrub
4	74° 11' 0.690" E	34° 14' 0.771" N	1000 m	Forest Area, Co 20/Rfd
5	74° 14' 12.003" E	34° 14' 25.858" N	1000 m	forest area, Co 16/Rfd
6	74° 14' 48.264" E	34° 13' 40.732" N	1000 m	chitte batin, Forest area
7	74° 14' 4.618" E	34° 13' 3.929" N	50 m	Forest Area, kawahill
8	74° 12' 58.892" E	34° 11' 50.569" N	1000 m	Village Hilan
9	74° 12' 18.447" E	34° 11' 13.076" N	2000 m	Forest Area, JV Divn, Katha Nar
10	74° 11' 58.364" E	34° 10' 26.987" N	1500 m	Forest Area, Dindwara Village
11	74° 11' 59.366" E	34° 9' 14.534" N	50 m	Pringal, Jhelum Village
12	74° 10' 26.288" E	34° 8' 36.733" N	1500 m	Upalhakmarg, Forest Area
13	74° 9' 4.215" E	34° 9' 29.800" N	1500 m	Tawarian Forest Area
14	74° 8' 12.285" E	34° 10' 47.517" N	1500 m	Forest Area
15	74° 7' 22.080" E	34° 11' 35.330" N	5000 m	Forest Area, Ishmabad Nala
16	74° 7' 10.332" E	34° 10' 57.357" N	3000 m	Bagna Nala, Forest Area
17	74° 7' 30.230" E	34° 10' 8.319" N	3000 m	Village, Islambad, Bagna & Forest Area
18	74° 7' 39.132" E	34° 9' 15.311" N	500 m	Bagna Nar
19	74° 6' 10.275" E	34° 8' 32.096" N	50 m	Forest Area
20	74° 4' 58.183" E	34° 9' 11.289" N	50 m	Forest Area
21	74° 3' 4.736" E	34° 9' 27.929" N	50 m	Forest Area
22	74° 2' 34.129" E	34° 9' 43.573" N	50m	Forest Area

23	74° 2' 17.347" E	34° 10' 5.887" N	50 m	Forest Area
24	74° 1' 11.906" E	34° 10' 39.053" N	50 m	Forest Area
25	74° 0' 16.650" E	34° 11' 21.498" N	50 m	Forest Area
26	73° 59' 52.862" E	34° 11' 38.957" N	50 m	Forest Area
29	74° 0' 9.615" E	34° 13' 8.461" N	50 m	Forest Area
30	74° 0' 47.853" E	34° 13' 19.283" N	50 m	Forest Area
33	74° 1' 43.414" E	34° 14' 1.310" N	50 m	Forest Area
37	74° 3' 42.507" E	34° 15' 47.506" N	50 m	Forest Area, co 31/rfd
27	73° 59' 47.024" E	34° 12' 35.036" N	50 m	Forest Area
28	74° 0' 0.110" E	34° 12' 54.794" N	50 m	Forest Area
29	74° 0' 22.943" E	34° 13' 20.318" N	50 m	Forest Area
31	74° 1' 1.870" E	34° 13' 23.833" N	50 m	Forest Area
32	74° 1' 31.712" E	34° 13' 45.728" N	50m	Forest Area
34	74° 1' 20.600" E	34° 14' 21.236" N	50 m	Forest Area, sidh kanu shah
34	74° 1' 28.929" E	34° 14' 44.601" N	50 m	Forest Area
35	74° 2' 19.213" E	34° 15' 34.140" N	50 m	Forest Area, co 31/rfd
38	74° 4' 3.486" E	34° 15' 50.648" N		Forest Area, open scrub
39	74° 4' 39.748" E	34° 15' 19.869" N	50 m	Forest Area, co 26/rfd
40	74° 5' 17.733" E	34° 15' 21.806" N	50 m	Forest Area, open scrub

ANNEXURE -II A

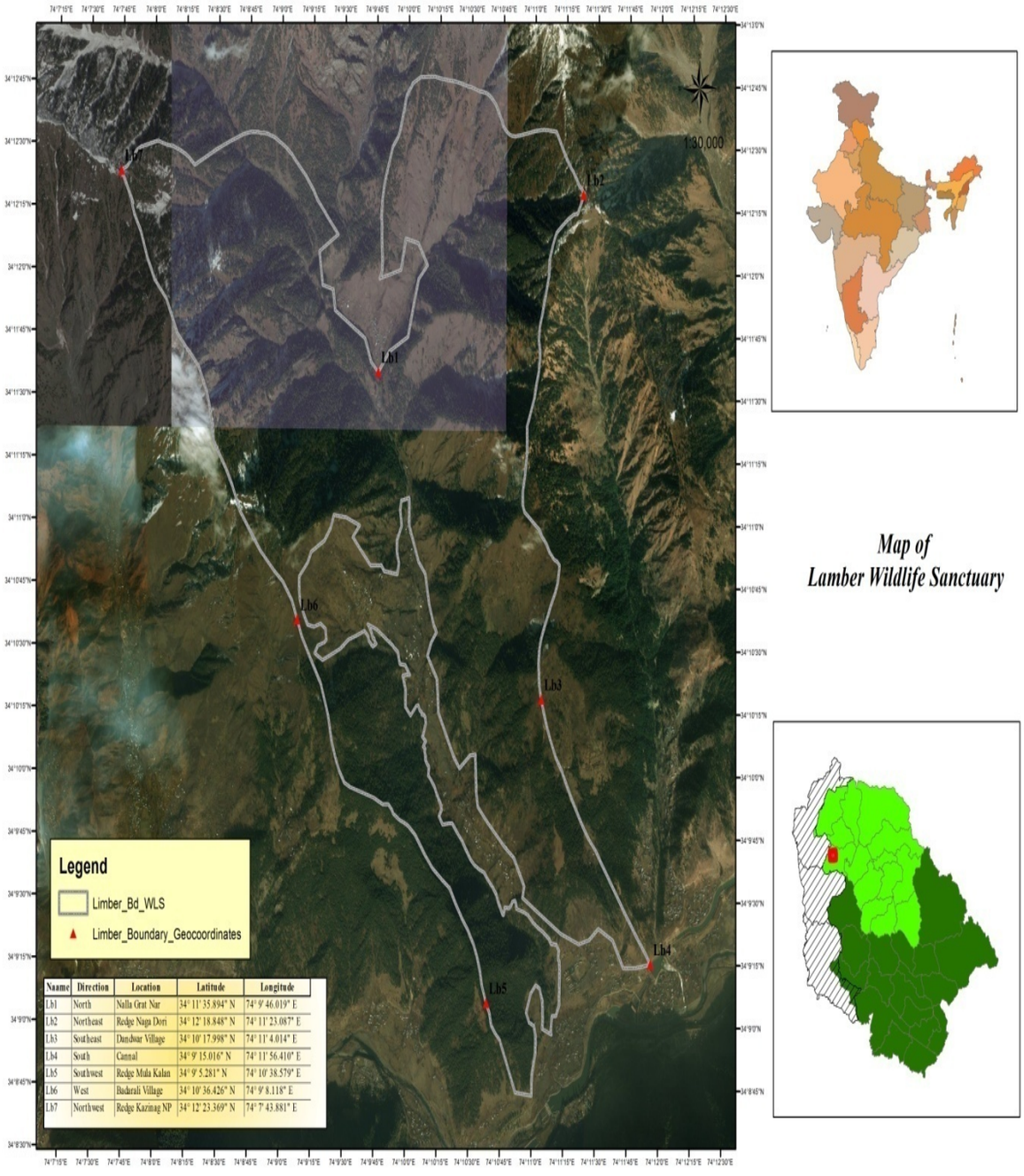
LOCATION MAPS OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATIONS





Name	Direction	Location	Latitude	Longitude
Lh1	North	Nalla Lachhawar	34° 12' 12.548" N	74° 4' 10.768" E
Lh4	Southeast	Bagna Nalla	34° 9' 24.652" N	74° 7' 15.305" E
Lh2	Northeast	Ridge	34° 11' 45.031" N	74° 6' 10.188" E
Lh5	South	Ridge and Nalla Relwari	34° 8' 32.672" N	74° 6' 48.890" E
Lh6	Southwest	Road Balistan	34° 8' 36.887" N	74° 5' 33.443" E
Lh 7	South	Road Mulnag Mari	34° 9' 14.484" N	74° 5' 42.037" E
Lh8	Northwest	Ridge	34° 10' 40.457" N	74° 1' 13.442" E
Lh3	Northeast	Kopra Ridge	34° 10' 42.003" N	74° 6' 8.019" E

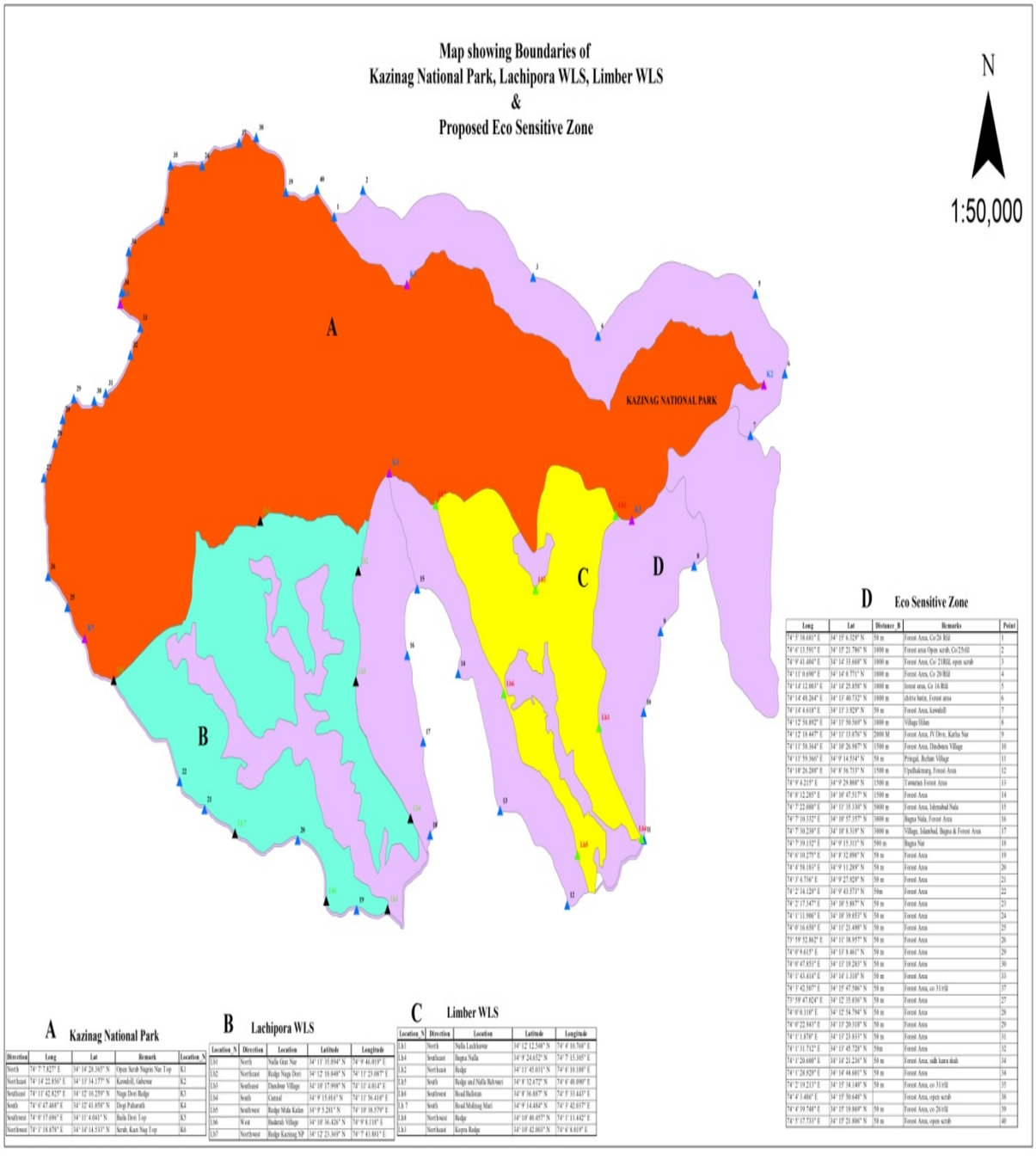
Map of
Lachipora Wildlife Sanctuary



Name	Direction	Location	Latitude	Longitude
Lb1	North	Nalla Grat Nar	34° 11' 35.894" N	74° 9' 46.019" E
Lb2	Northeast	Redge Naga Dori	34° 12' 18.848" N	74° 11' 23.087" E
Lb3	Southeast	Dandwar Village	34° 10' 17.998" N	74° 11' 4.014" E
Lb4	South	Cannal	34° 9' 15.016" N	74° 11' 56.410" E
Lb5	Southwest	Redge Mula Kalan	34° 9' 5.281" N	74° 10' 38.579" E
Lb6	West	Badarali Village	34° 10' 36.426" N	74° 9' 8.118" E
Lb7	Northwest	Redge Kazinag NP	34° 12' 23.369" N	74° 7' 43.881" E

ANNEXURE -II B

MAP SHOWING BOUNDARIES OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATION



A Kazinag National Park

Direction	Long	Lat	Remark	Location_N
North	74° 7' 5.827" E	34° 14' 28.385" N	Open Scrub Nagrin Nar Top	A1
Northeast	74° 14' 22.850" E	34° 13' 34.179" N	Kawshil, Gahroor	A2
Southeast	74° 11' 42.825" E	34° 12' 16.259" N	Naga Dori Ridge	A3
South	74° 6' 47.468" E	34° 12' 41.050" N	Dogi Paharuth	A4
Southwest	74° 0' 37.696" E	34° 11' 4.041" N	Bada Dori Top	A5
Northwest	74° 1' 18.876" E	34° 14' 14.513" N	Scrub, Kazi Nag Top	A6

B Lachipora WLS

Location_N	Direction	Location	Latitude	Longitude
L51	North	Nalla Grai Nar	34° 11' 35.894" N	74° 9' 46.019" E
L52	Northeast	Ridge Naga Dori	34° 12' 18.848" N	74° 11' 23.087" E
L53	Southwest	Dandsar Village	34° 10' 17.598" N	74° 11' 4.014" E
L54	South	Central	34° 9' 15.161" N	74° 11' 56.410" E
L55	Southwest	Ridge Mala Kalan	34° 9' 5.241" N	74° 10' 38.579" E
L56	West	Badarah Village	34° 10' 36.426" N	74° 9' 8.110" E
L57	Northwest	Ridge Kazinag NP	34° 12' 23.369" N	74° 7' 43.861" E

C Limber WLS

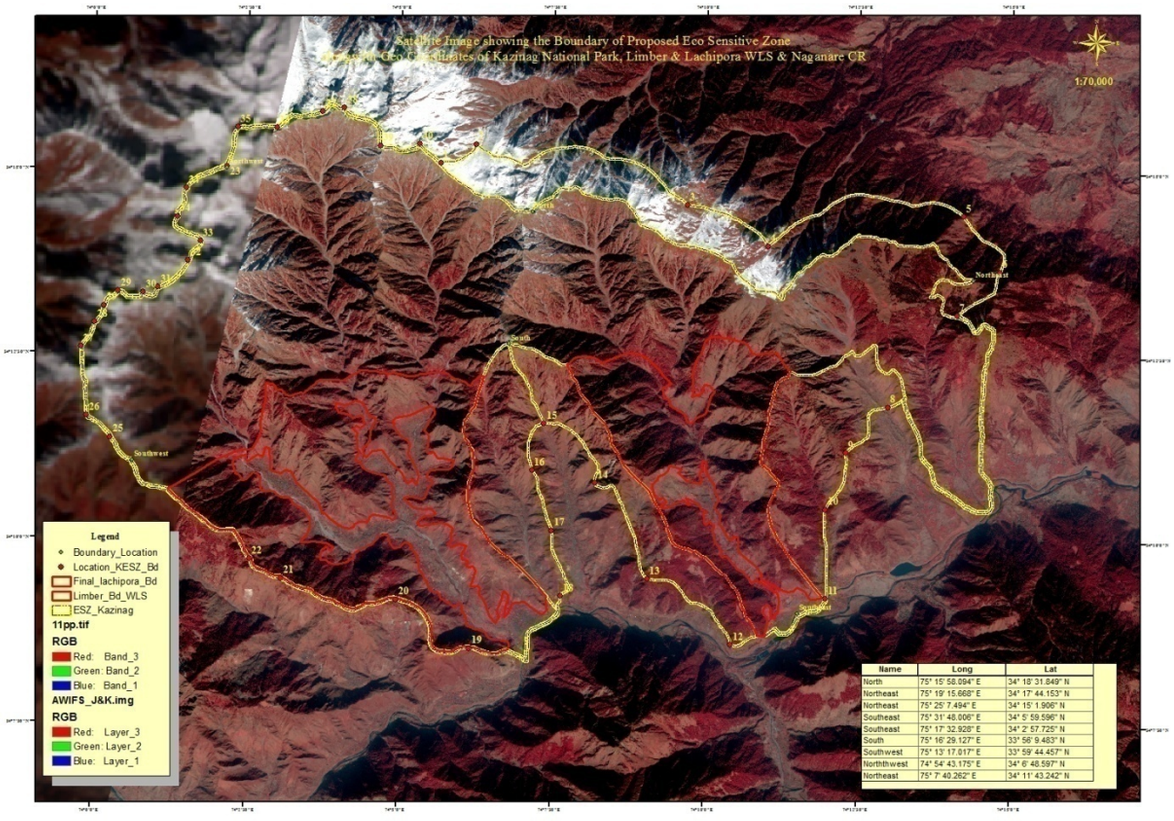
Location_N	Direction	Location	Latitude	Longitude
L1	North	Nalla Lachkiwar	34° 12' 12.548" N	74° 4' 10.768" E
L4	Southeast	Bagna Nalla	34° 9' 24.652" N	74° 7' 15.385" E
L2	Northeast	Ridge	34° 11' 45.011" N	74° 6' 10.186" E
L5	South	Ridge and Nalla Balwari	34° 8' 32.672" N	74° 6' 48.090" E
L6	Southwest	Road Bahtan	34° 8' 36.887" N	74° 5' 53.443" E
L7	South	Road Mohlaag Mari	34° 9' 14.484" N	74° 5' 42.037" E
L8	Northwest	Ridge	34° 10' 40.457" N	74° 1' 13.442" E
L3	Northeast	Kopra Ridge	34° 10' 42.003" N	74° 4' 8.819" E

D Eco Sensitive Zone

Long	Lat	Distance_B	Remarks	Point
74° 9' 38.681" E	34° 15' 6.329" N	50 m	Forest Area, Cr/26 Rfd	1
74° 6' 13.591" E	34° 15' 21.786" N	1000 m	Forest area Open scrub, Cr/25/d	2
74° 9' 41.464" E	34° 14' 33.668" N	1000 m	Forest Area, Cr/ 21Rfd, open scrub	3
74° 11' 0.690" E	34° 14' 4.771" N	1000 m	Forest Area, Cr 26/Rfd	4
74° 14' 12.003" E	34° 14' 25.858" N	1000 m	forest area, Cr 16 Rfd	5
74° 14' 48.264" E	34° 13' 40.732" N	1000 m	chitta batin, Forest area	6
74° 14' 4.618" E	34° 13' 3.929" N	50 m	Forest Area, kawshil	7
74° 12' 58.892" E	34° 11' 50.569" N	1000 m	Village Hilan	8
74° 11' 18.447" E	34° 11' 13.076" N	2000 M	Forest Area, JV Dive, Kalla Nar	9
74° 11' 58.364" E	34° 10' 26.987" N	1500 m	Forest Area, Dindsara Village	10
74° 11' 59.366" E	34° 9' 14.534" N	50 m	Pringal, Reban Village	11
74° 10' 26.280" E	34° 8' 36.713" N	1500 m	Upalhalmarg, Forest Area	12
74° 9' 4.215" E	34° 9' 29.800" N	1500 m	Tawarian Forest Area	13
74° 8' 12.245" E	34° 10' 47.517" N	1500 m	Forest Area	14
74° 7' 22.680" E	34° 11' 35.130" N	5000 m	Forest Area, Ishmahal Nala	15
74° 7' 10.332" E	34° 10' 57.357" N	3000 m	Bagna Nala, Forest Area	16
74° 7' 30.230" E	34° 10' 8.319" N	3000 m	Village, Islambal, Bagna & Forest Area	17
74° 7' 39.132" E	34° 9' 15.311" N	500 m	Bagna Nar	18
74° 6' 10.275" E	34° 8' 32.096" N	50 m	Forest Area	19
74° 4' 58.183" E	34° 9' 11.269" N	50 m	Forest Area	20
74° 3' 4.734" E	34° 9' 27.529" N	50 m	Forest Area	21
74° 2' 34.128" E	34° 9' 43.373" N	50m	Forest Area	22
74° 2' 17.347" E	34° 10' 5.887" N	50 m	Forest Area	23
74° 1' 11.900" E	34° 10' 39.853" N	50 m	Forest Area	24
74° 0' 16.650" E	34° 11' 21.490" N	50 m	Forest Area	25
73° 59' 52.862" E	34° 11' 38.957" N	50 m	Forest Area	26
74° 0' 9.615" E	34° 13' 8.461" N	50 m	Forest Area	29
74° 0' 47.853" E	34° 13' 19.283" N	50 m	Forest Area	30
74° 1' 43.414" E	34° 14' 1.310" N	50 m	Forest Area	33
74° 3' 42.507" E	34° 15' 47.506" N	50 m	Forest Area, cr 31/fd	37
73° 59' 47.024" E	34° 12' 35.830" N	50 m	Forest Area	27
74° 0' 8.110" E	34° 12' 54.794" N	50 m	Forest Area	28
74° 0' 22.943" E	34° 13' 20.318" N	50 m	Forest Area	29
74° 1' 1.870" E	34° 13' 23.833" N	50 m	Forest Area	31
74° 1' 31.732" E	34° 13' 45.728" N	50m	Forest Area	32
74° 1' 20.600" E	34° 14' 21.236" N	50 m	Forest Area, sub kana shah	34
74° 1' 28.929" E	34° 14' 44.603" N	50 m	Forest Area	34
74° 2' 19.233" E	34° 15' 34.140" N	50 m	Forest Area, cr 31/fd	35
74° 4' 3.486" E	34° 15' 50.648" N		Forest Area, open scrub	36
74° 4' 39.748" E	34° 15' 19.869" N	50 m	Forest Area, cr 26/fd	39
74° 5' 17.733" E	34° 15' 21.886" N	50 m	Forest Area, open scrub	40

ANNEXURE -II C

SATELLITE MAP OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATION



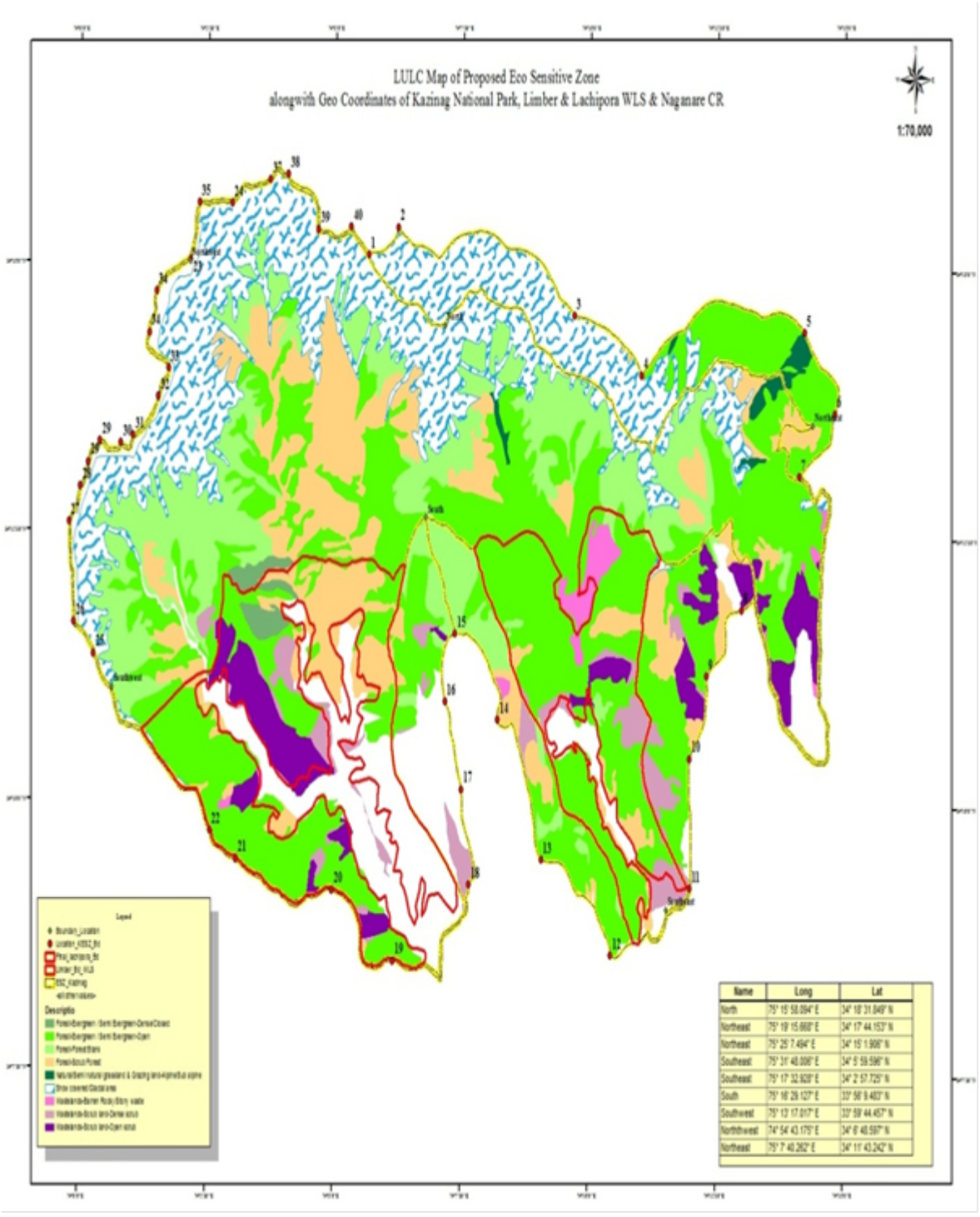
ANNEXURE -II D

MAP OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH LATITUDE AND LONGITUDE OF PROMINENT LOCATION



ANNEXURE -II E

LAND USE LAND COVER MAP OF ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY



ANNEXURE -III

A. TABLE SHOWING THE GEO-COORDINATE OF THE PROTECTED AREA OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY

Kazinag National Park				
Name	**Direction**	**Location**	**Latitude**	**Longitude**
K1	North	Open Scrub Nagrin Nar Top	34^0 14' 28.365" N	74^0 7' 7.827" E
K2	North-East	Kawa hill, Gabewar	34^0 13' 34.177" N	74^0 14' 22.856" E
K3	South-East	Naga Dori Redge	34^0 12' 16.259" N	74^0 11' 42.825" E
K4	South	Dogi Paharuth	34^0 12' 41.058" N	74^0 6' 47.468" E
K5	South-West	Baila Dori Top	34^0 11' 4.041" N	74^0 0' 37.696" E
K6	North-West	Scrub, Kazi Nag Top	34^0 14' 14.533" N	74^0 1' 18.878" E
Lachipora Wildlife Sanctuary				
Name	**Direction**	**Location**	**Latitude**	**Longitude**
Lh1	North	Nalla Lachhawar	34^0 12' 12.548" N	74^0 4' 10.768" E
Lh4	South-East	Bagna Nalla	34^0 9' 24.652" N	74^0 7' 15.305" E
Lh2	North-East	Redge	34^0 11' 45.031" N	74^0 6' 10.188" E
Lh5	South	Redge and Nalla Rehwari	34^0 8' 32.672" N	74^0 6' 48.090" E
Lh6	South-West	Road Balistan	34^0 8' 36.887" N	74^0 5' 33.443" E
Lh7	South	Road Mulinag Mari	34^0 9' 14.484" N	74^0 3' 42.037" E
Lh8	North-West	Redge	34^0 10' 40.457" N	74^0 1' 13.442" E
Lh3	North-East	Kopra Redge	34^0 10' 42.003" N	74^0 6' 8.019" E
Limber Wildlife Sanctuary				
Name	**Direction**	**Location**	**Latitude**	**Longitude**
Lb1	North	Nall Grat Nar	34^0 11' 35.894" N	74^0 9' 46.019" E
Lb2	North-East	Redge Naga Dori	34^0 12' 18.848" N	74^0 11' 23.087" E
Lb3	South-East	Dandwar Village	34^0 10' 17.998" N	74^0 11' 4.014" E
Lb4	South	Cannal	34^0 9' 15.016" N	74^0 11' 56.410" E
Lb5	South-West	Rege Mula Kalan	34^0 9' 5.281" N	74^0 10' 38.579" E
Lb6	West	Badarali Village	34^0 10' 36.426" N	74^0 9' 8.118" E
Lb7	North-West	Redge Kazinag NP	34^0 12' 23.369" N	74^0 7' 43.881" E

B. TABLE SHOWING THE GEO-COORDINATES OF THE ESZ BOUNDARIES OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY

Direction	Boundary Description	Latitude (N)	Longitude (E)
North	Kudbani Forest area	34° 14' 33.668"N	74° 9' 41.404"E
North-East	Chitte Batin Forest area	34° 13' 40.732"N	74° 14' 48.264"E
East	Gabbewar area	34° 13' 1 3.929"N	74° 14' 4.618"E
South-East	Katha Nallah area	34^0 10’ 26.987’’N	74^0 11’ 58.364’’E
South	Thathla Mula area	34^0 8’ 36.733’’N	74^0 10’ 26.288’’E
South-West	Loipahatka Chhamb area	34^0 11’ 21.498’’N	74^0 0’ 16.650’’E
West	Garaja Gali area	34^0 13’ 8.461’’N	74^0 0’ 9.615’’E
North-West	Kazinag area	34^0 15’ 34.140’’N	74^0 2’ 19.213’’E

ANNEXURE -IV

LIST OF VILLAGE FALLING UNDER ECO-SENSITIVE ZONE OF KAZINAG NATIONAL PARK, LIMBER WILDLIFE SANCTUARY & LACHIPORA WILDLIFE SANCTUARY ALONG WITH GEO-COORDINATES

The following eighteen villages/townships fall within the proposed ESZ of Kazinag National park, Limber Wildlife Sanctuary & Lachipora Wildlife Sanctuary:

S.No.	Village	Tehsil	District	Latitude	Longitude
1.	Bagna	Boniyar	Baramulla	34°10'29.171"N	74° 6'43.904"E
2.	Kopra	Boniyar	Baramulla	34°10'43.999"N	74° 6'13.486"E
3.	Kath Beikh	Boniyar	Baramulla	34°1'15.935"N	74° 6'39.197"E
4.	Naga Pathri	Boniyar	Baramulla	34°12' 2.669"N	74° 6'30.519"E
5.	Islamabad	Boniyar	Baramulla	34°10' 2.536"N	74° 7'21.262"E
6.	Bujanthal	Boniyar	Baramulla	34° 9' 47.050"N	74° 9' 7.755"E
7.	Nalla	Boniyar	Baramulla	34° 9' 35.054"N	74° 10'2.232"E
8.	Upalhakimarg	Boniyar	Baramulla	34° 8' 41.100"N	74°10’39.331"E
9.	Naugiran	Boniyar	Baramulla	34° 8' 50.221"N	74° 11' 7.345"E
10.	Dandwara	Boniyar	Baramulla	34°10'30.316"N	74°11'11.034"E
11	Piharan	Boniyar	Baramulla	34° 9' 45.737"N	74°11'57.188"E
12.	Kaha Bahak	Boniyar	Baramulla	34°11'29.712"N	74°11'30.105"E
13.	Hillan	Boniyar	Baramulla	34°11'58.575"N	74°12'49.433"E
12.	Bugna	Boniyar	Baramulla	34° 9' 47.460"N	74° 7' 17.499"E
13.	That Mulla Khan	Boniyar	Baramulla	34° 9' 5.449"N	74° 10' 9.346"E

14.	Gabbewar	Boniyar	Baramulla	34°13'26.507"N	74°13'55.534"E
15.	Chitte Batin	Boniyar	Baramulla	34°13'27.679"N	74°14'29.857"E
16.	Tund Bahk	Boniyar	Baramulla	34°14'32.527"N	74°13'25.312"E
17.	Pahlipora	Boniyar	Baramulla	34°14'35.803"N	74°13'16.337"E
18.	Katha	Boniyar	Baramulla	34°10'47.679"N	74° 12' 2.444"E

ANNEXURE -V

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.

Uploaded by Dte. of Printing at Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

ALOK KUMAR Digitally signed by ALOK KUMAR Date: 2021.06.09 20:23:52 +05'30'

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 CHIEF WILDLIFE WARDEN

Subject: Approval of Integrated Management Plan for Kazinag National Park and Limber & Lachipora Wildlife Sanctuaries.

Whereas; the Draft Integrated Management Plan of Kazinag National Park and Limber & Lachipora Wildlife Sanctuaries has been prepared by Wildlife Warden, North Division.

Whereas; the draft 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 20.09.2021 & 13.12.2021 and discussed the Draft Integrated Management Plan for Kazinag National Park and Limber & Lachipora Wildlife Sanctuaries.

Whereas; the above said committee in its final meeting held on 13.12.2021, recommended for approval of Management Plan of Kazinag National Park and Limber & Lachipora Wildlife Sanctuaries for a period 2021-2031, subject to the incorporation of suggested points in the meeting.

Whereas; a chapter on adjoining Naganaree Conservation Reserve has been incorporated in the draft Integrated Management Plan as observed in the meeting of the committee held on 13.12.2021.

Whereas; the Regional Wildlife Warden, Kashmir vide his No: RWLW/K/Tech/2021-22/1763-64 dated 11.02.2022 has submitted that the points in the final meeting of committee have been incorporated in Management Plan of Kazinag National Park and Limber & Lachipora Wildlife Sanctuaries and recommended for its approval.

Therefore, under the authority vested under Sections 33 & 35 of Wildlife Protection Act, 1972 the undersigned accords approval to the Integrated Management Plan for Kazinag National Park and Limber & Lachipora Wildlife Sanctuaries for the period 2021-31, 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/2021-22/387-90 dated: 15-02-2022.

Copy to the:

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, North Division, Sopore.
04. Pvt. Secretary to Pr. Chief Conservator of Forests & HoFF, J&K for kind information of PCCF/HoFF.


DEPARTMENT OF WILDLIFE PROTECTION
J&K GOVT.