A tiger with orange fur and black stripes is lying down in a dense, green forest. The tiger is looking towards the right of the frame. The background is filled with various types of green plants and trees.

**KARNATAKA FOREST DEPARTMENT  
MANAGEMENT PLAN FOR  
SHARAVATHI VALLEY WILDLIFE  
SANCTUARY  
DURING 2006-07 to 2015-16**

**DEPUTY CONSERVATOR OF FORESTS  
WILDLIFE DIVISION  
SHIMOGA**

# KARNATAKA STATE MAP

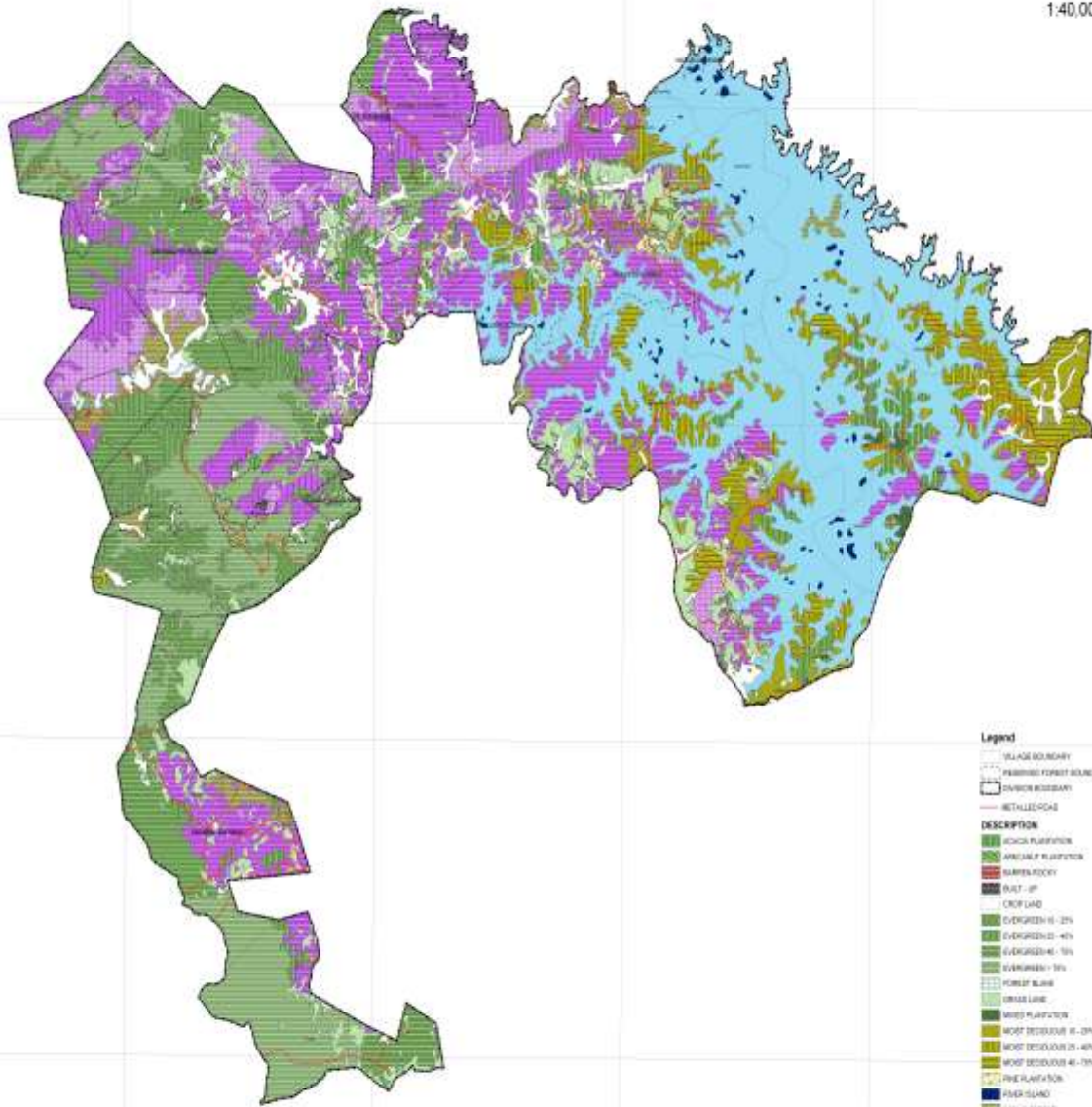


ADMINISTRATIVE MAP OF  
TIRTHAHALLI WILDLIFE SANCTUARY

## SHIMOGA DISTRICT MAP



Draft Vegetation Map of Sharavathi Wild Life Sanctuary



- Legend**
- VILLAGE BOUNDARY
  - PERENNIAL FOREST BOUNDARY
  - DIVISION BOUNDARY
  - METALLOIDS
- DESCRIPTION**
- ACACIA PLANTATION
  - ARECANUT PLANTATION
  - BARBEL/TREES
  - BUILT-UP
  - CROP LAND
  - EVERGREEN II - 25%
  - EVERGREEN II - 40%
  - EVERGREEN II - 50%
  - EVERGREEN II - 75%
  - FOREST BLANK
  - GRASS LAND
  - MIXED PLANTATION
  - MOIST DEcidUOUS II - 25%
  - MOIST DEcidUOUS II - 40%
  - MOIST DEcidUOUS II - 75%
  - PINE PLANTATION
  - PLANTATION
  - SCRUB FOREST
  - SCRUB LAND
  - SEMI DEcidUOUS I - 25%
  - SEMI DEcidUOUS I - 40%
  - SEMI DEcidUOUS I - 75%
  - SEMI DEcidUOUS I - 10%
  - SEMI DEcidUOUS I - 15%
  - WATER BODY



## **ACKNOWLEDGEMENT**

This management plan for Sharavathi Valley Wildlife Sanctuary is prepared for the period from 2006-07 to 2015-16. At present an area of 431.230 Sq. Kms., out of which an extent of 400.080 Sq. Kms is under the control of wildlife division. The balance area of 31.150 Sq. Kms is yet to be handed over to the Wildlife Division from the Territorial division of Sagar. While preparing this management plan details of various proposals were discussed with the Asst. Conservator of Forests, Wildlife sub-division, the Range Forest Officer, Kargal, the Range Forest Officer, Kogar and other field officials of Sharavathi valley wildlife sanctuary. Final Plan has been prepared and brought out under the gracefull and inspiring guidances of Sri A.K.Varma, IFS., Principal Chief Conservator of Forests and Chief Wildlife Warden, Sri P.Anur Reddy, IFS., Chief Conservator of Forests and Technical Assistant to Principal Chief Conservator of Forests, (Wildlife) and Sri P.L.Budhihal, IFS., Conservator of Forests, Shimoga Circle, Shimoga and my sincer gratitudes are due to them.

My thanks are due to Sri T.J.Ravi Kumar, Asst. Conservator of Forests, and other unit officers of Sharavathi wildlife sanctuary for their assistance in preparation of management plan.

**(MILLO TAGO, I.F.S.)**  
**Deputy Conservator of Forests,**  
**Wildlife Division, Shimoga.**

Place : Shimoga  
Date : 06.06.2007

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## PART – I

### The protected area: The existing situation area

#### Chapter – 1: Introduction to the area:

**1.1 Name, Location, Constitution and Extent:** Sharavathi Valley Wildlife Sanctuary is spread over in the Sharavathi River Valley of Sagar Taluk in Shimoga District. The area of the Sanctuary is 431.23 Sq. Kms out of which an area of 123.63 Sq. Kms is under the water spread of Sharavathi Reservoir. The Sanctuary lies in the Western Ghats, mainly covered with evergreen and semi-evergreen forests in the valleys and grassy patches on hill tops, and is immensely rich in flora and fauna both in variety and diversity. Parts of the sanctuary, mostly in the grassy blanks, have been planted up with Acacia auriculiformies, Cashew and fruit yielding species. The evergreen and semi-evergreen forests in the valleys are immensely rich in species like Dhoopa, Gulmavu, Surahonne, Mavu, Nandi etc. They harbour wildlife like Bison, Spotted deer, Tiger, Panther etc. The hilly areas actually drain water to area than to the catchment Sharavathi River, clustered with small and big nalas. The area serves as living place for many vertebrates and invertebrates. The sanctuary has got innumerable herbs, shrubs, ferns and grasses many of which are yet to be surveyed and listed.

The sanctuary lies in the western ghat which is fragile and having luxuries forest cover mixed with grassy blanks, cane and wild pepper. The same is found in Nagavalli, Kanuru, Padubeedu and Kattinkar areas. The wild pepper naturally growing is endemic to Kanoor Kote areas.

The important and developed area of the sanctuary in the interest of wildife and visitors are Sasichowka, Muppane nature camp & Holebagilu Prakruthi vana.

The sanctuary remains open throughout the year, which harbours variety of tropical flora and fauna. Sanctuary is a abode of Gaur and having rare lion tailed maquaque with numerous medicinal plants, tree cover, and beautiful birds particularly in and around Sharavathi back water area.

**LOCATION:** Sharavathi Valley Wildlife Sanctuary is situated in Sagar Taluk, of Shimoga District. The nearest Railway Station is Thalaguppa which is 15 Kms and nearest Airport is Mangalore, which is 200 Kms from the Sanctuary. Lies between latitudes 13° 54' to 14° 12' North and longitudes 74° 38' to 75° 00' East.

**CONSTITUTION AND EXTENT:** Sharavathi Valley Wildlife Sanctuary was notified vide Government order No. AFD70/FWL71/ Dated 20.04.1972 and has an area of 431.23 Sq. Kms. with a final notification No. AFD/12/FWL/74 Dated 27.06.1974 A Wildlife Division has been functioning independently since 01.08.1993 after taking over of 6 State Forests, submersion area and islands, from Sagar Territorial Division.

Details of State Forests and other areas coming under Sharavathi Valley Wildlife Sanctuary are as follows.

| Sl. No. | Name of the forest | Legal status | Block No. | Compartment No. | Notification No.   | Area in Ha. |
|---------|--------------------|--------------|-----------|-----------------|--|-------------|
| 1       | Govardhanagiri     | SF           | XX        | 1-34 (34)       | R. 8251-Ft. 116-07-7, dated: 16 <sup>th</sup> June 1908    | 13473.68    |
| 2       | Karini             | SF           | XXI       | 1-17 (17)       |  | 5102.53     |
| 3       | Muppene Bl. A      | SF           | XIX       | 4,5,6,7 (4)     | No. A. F, 301-Ft   | 961.77      |
| 4       | Muppene Bl. B      | SF           | XIX       | 8,9,10,11 (4)   | -265-39-3dated: 17 <sup>th</sup> Jul. 1940                 | 629.16      |
| 5       | Channagonda (part) | SF           | XIX       | 13 (part)       | No. C, 290-Ft-53-35-3 dated: 16 <sup>th</sup> Oct. 1935.   | 701.05      |
| 6       | Attigodu           | SF           | XIX       | 1,2,3 (3)       | I.C. 3951-4-Ft-167-24-6 dated: 10 <sup>th</sup> Dec. 1925. | 763.70      |
| 7       | Submerged area     |              |           |                 |  | 12363.00    |
| 8       | Islands            |              |           |                 |  | 507.00      |

|   |        |  |  |                |  |                 |
|---|--------|--|--|----------------|--|-----------------|
| 9 | Others |  |  |                |  | 8621.11         |
|   |        |  |  | <b>TOTAL:-</b> |  | <b>43123.00</b> |

**1.2: APPROACH AND ACCESS:** The sanctuary can be approached from Shimoga which is about 104 Km from Shimoga city and 34 Km from Sagar town. The sanctuary fall on either side of Kargal-Batkal road. The roads existing inside the sanctuary are village roads and are being used for patrolling. And majority of the existing roads are connecting from one settlement to the other. The existing roads inside the sanctuary are being used by the public as well as by the department.

**1.3. STATEMENT OF SIGNIFICANCE:** The sanctuary is having 40 small villages comprising usually of 1 to 10 houses in each village. These villages are situated in valleys where perennial water source and deep soil is available. None of the settlements are thickly populated. The people naturally move inside the sanctuary as they are depending upon the sanctuary for their fuel, fodder, small timber and other inevitable forest produces required for normal living.

The Mysore Paper Mills Limited has raised lot of Acacia auriculiformis plantations on grassy blanks of the sanctuary. The wildlife wing also raised mixed plantations mainly fruit yielding species. Acacia plantations raised around the periphery of shola forest in order to control fire hazard.

There are 40 vilages inside the sanctuary. Re-habilitation of these people is a very difficult task. Most of the wildlife activities are labour oriented. Which are now carried out by the local villagers. The immediate need is to gain the confidence of the local people by involving them gainfully in wildlife development activities, and slowly they can be educated to understand the very purpose of the creation of the wildlife sanctuary. Their co-operation is very much needed to provide social fencing which will protect the sanctuary.

The Karnataka Power Corporation Limited has taken up sample survey works for the construction of mini dams for storage of water and subsequently to feed the same to Linganamakki hydro-electric project. To carry out this project the patches of forest area will

have to be cleared for link roads and submersion by mini dams. The M.P.M. Limited had also raised plantations in grassy patches in large extent. These may also create disturbance to wild animals during harvesting period. As these plantations lead to reduction of grazing ground for herbivorous animals, raising of such plantation has been stopped now. Poaching threat of bisons near by Govardhanagiri forest area is to be controlled by proper vigil and patrolling.

This sanctuary area previously came under the control of the princely State of Mysore. The Mysore Kingdom had shown keen interest towards the protection of forests, and for better management of forests and wild-life, all the forest areas had been declared as State Forests during 1905-1940. Since then, these forests have been managed in a systematic way for fulfilling the needs of people.

During 1964-65, Linganamakki dam was constructed across the Sharavathi river which led to submersion of many villages and forest areas. The people affected by this hydro-electric project were shifted from the project area and allowed to settle in various other places. After the submersion of forest area many big and small Islands has created. The study and perambulation of these Islands shows good vegetation due to least biotic pressure and inaccessible. Efforts has been made for naming these Islands with GPS location. There are 31 Islands found in the sanctuary.

After the enactment of the Wildlife (protection) Act, 1972 and Forest Conservation Act, 1980, more emphasis has been given for protection of Wildlife and in creating awareness among the people about the need to conserve Wildlife. Then onwards the protection and development activities towards the better management of wildlife in the sanctuary were commenced and continued by the Wildlife wing of the Forest Department. With the handing over of the sanctuary areas to the wildlife wing by the territorial wing, these activities have been further intensified in a systematic way.

## CHAPTER -2

### BACKGROUD INFROMATION AND ATTRIBUTES

**2.1. BOUNDARIES:** The Sanctuary was declared vide preliminary notification No. AFD.70.FWL-71, Dated 20.04.1972 of Govt. of Karnataka (Annexure – I) and final notification No. AFD 22 FWL 74 Dated: 27.06.1974 The boundaries of the Sanctuary are as follows.

- NORTH** : Jog S.F., Thalakalale Reservoir and Karagal S.F. forms the northern boundary of the Sanctuary.
- EAST** : Eastern boundary of Sharavathi Reservoir forms the Eastern boundary of the Sanctuary.
- SOUTH** : Mukambika Wildlife Sanctuary and North Canara District boundary from the southern boundaries.
- WEST** : Common boundary of Shimoga and North Canara district forms Western boundary of the Sanctuary.

There are about 24 villages inside the sanctuary. The extent of enclosures have to be surveyed and boundaries to be demarcated on the ground. In order to restrict them to their hamlets and agricultural field, it is urgent and important to carry out survey and demarcation of the existing cultivated lands also then the boundaries of the sanctuary and enclosures will be marked using appropriate stone pillars and by digging the cattle proof trench.

**2.2. GEOLOGY, ROCK AND SOIL:** The area is highly undulating with altitudinal range of 94 mts. MSL at Nagavalli to 1102 mts. MSL at Edigudda and consists of valleys and hillocks. The area is marked by perennial nalas and a large number of small streams. The forests are rich with evergreen and semi-evergreen species and dense under growth.

The under lying geological formation is igneous and consists generally of quartz, schists, granite gneisses, chlorite schists, micaschists and hors blend schists. The soils vary in depth and fertility. The valleys and lower slopes generally contain deep sandy loam with good

covering of decaying organic matter. They are well drained and well suited for tree growth. On hill tops, soils are shallow and sustain grass. In some places, lateritic out-crops are found.

**2.3. TERRAIN:** The area is highly undulating with varied altitude. The area is marked by perennial nallas and a large number of small streams. The forest are rich with evergreen and semi evergreen species and dense undergrowth.

**2.4. CLIMATE:** Local aspect and elevation influence the climate. The climate is of monsoon type. The intensity of rain fall is more during June to September by the regular south west monsoon. The break of the monsoon is attended by high velocity wind. The temperature varies from 11° C to 38° C depending upon the factor of elevation. It is moist and warm except from November to the end of January when it is cool and pleasant. During March, April and May the climate is hot. March is the hottest and driest month when the fire occurrences are frequent. The foot hills and plain areas are hotter than the plateau.

**2.4.1. RAIN FALL PATTERN AND DISTRIBUTION:** The South-West monsoon brings most of the rain, commencing usually in the early part of June with short interruption and continues till September. The rainfall, particularly during monsoon, is very heavy. The sanctuary is exposed to torrential showers during April, May and October with heavy showers in June, July and August. The erosive action of the torrential rain can be noticed in open areas. In areas devoid of vegetation cover the, top soil gets washed out with water resulting in unproductive, barren lateritic surfaces. The average rainfall of the area is 4500 mm.

**2.4.2. TEMPERATURE: A SUMMARY OF YEAR ROUND PATTERN:** The dry, wet and cold seasons are recognized. The cold season starts from December and lasts up to February. Later the hot season starts and last up to May and is followed by the wet season with the on set of Monsoon. The climate in general is humid and wet, with average minimum and maximum temperatures being near about 15° c to 38° c respectively. Water supply is adequate during rainy season but not so during summer.

**2.4.3. HUMIDITY: A SUMMARY OF YEAR ROUND PATTERN:** Air is humid at all times especially under the evergreen and semi evergreen cover. Atmospheric water vapor does not severe far, from the saturation point, at any time of the day or night. Early morning precipitation arising out of condensation of the excessive moisture on the leaf surface due to fall in temperature is quite heavy during November, December and January. Fall in the night temperature is common during the months of February, March and April.

**2.4.4. WINDS SPEED: A YEAR ROUND PATTERN:** The two monsoon winds which blow over the sanctuary are

- i. South-Westerly wind between June and September.
- ii. The North-Easterly wind between September and December.

**2.4.5. DROUGHT AND ITS PERIODICITY:** The drier months starts form October to end of May. The drought may occur during the month of March and April. There is acute shortage of drinking water to the wildlife during these months which occur annually.

**2.5. WATER SOURCES:** Sharavathi River and its reservoir constructed near Linganamakki, is the main source of water in the sanctuary. Also, there are many tributaries which are perennial. Perennial small river Yennehole ses through Karani S.F. and Sarala hole passes through Govardhanagiri S.F. are helpful to wildlife during summer season of western and eastern side of the sanctuary. A number of check dams and tanks construct, store water and become source of water during summer. A number of ponds, small tanks, check dams have been constructed to restore water during summer for the wildlife. The water spread area in the sanctuary is 123.63 Sq. Kms.

Though the area received average rainfall of about 4500 mm annually, it is amazing to notice that some of the nalas and small tanks dry up as early as in February except some perennial ones. About 85% of the precipitation is lost as run-off due to inadequate soil and water conservation measures and owing to steep terrains. Due to steep slopes and heavy rainfall, the top soil is washed away resulting in soil erosion and loss of fertility. Hence effective soil and water management practice are absolutely necessary.



Soil and water conservation measures to be undertaken, include, construction of gully checks, check dams and water holes in a phased and systematic manner. Check dams will help in reducing water force and in increasing insitu infiltration of water; there by sub soil water will be recharged and nalas will become perennial.

## **2.6. RANGE OF WILDLIFE, STATUS, DISTRIBUTION AND HABITAT:**

### **2.6.1. VEGETATION:**

**2.6.1.1. THE BIO-GEOGRAPHIC CLASSIFICATION:** Western ghat forests are celebrated for their diversity. Millions of years of evolutionary pressures, shaped these ecosystems in to the most complex in the world. There is an intricate web of life, which is the essence of forests themselves. Very few habitations on earth contain such profusion or weight of plant life per hectare; hidden by vegetation from all but a trained eye multitude of plants and animals, rare, strange and beautiful.

The biotic factors and edifice variations have played a dominant role in determining the nature of the forests growing in the sanctuary. The eastern portion of the sanctuary comprises dry deciduous forests and it gradually changes to moist deciduous type as we go towards the west. The following types of forests are mainly found in the sanctuary.

### **2.6.1.2: THE FOREST TYPES, COVER AND FOOD FOR WILD ANIMALS:**

The biotic facing and edaphic variations have played a dominant role in determining the nature of the forests growing in the sanctuary. The following two types of forests are mainly found in sanctuary.

- A. **The Southern Tropical Evergreen Type** : This type is seen in Nagavalli, Kannor Kote, part of Biligar and Kattinkar areas. The top canopy consists of **Deptero carpus indicus, Calophyllum tomentosum, Machilus mecarantha, Acrocarpus, fraxinopoliis, Bischfia Javanica, Syzigium Species, Alstonia scholaris Eugeria Mangifera indica.**  
Second canopy consists of **caryota urens, Aporasa lindleyana** etc.

**CLIMBER :** The following climbers are found in the sanctuary.

- |    |                       |   |           |
|----|-----------------------|---|-----------|
| 1. | Calycoptis floribunda | - | Neerballi |
| 2. | Gnetum scandens       | - | Hulubilu  |
| 3. | Entanda scandens      | - | Aneballi  |
| 4. | Acacia Concinna       | - | Seegekai  |
| 5. | Acacia intia          | - | Kaduseege |

The ground storey consists of strobilanthus species, calamus species, **Helicteres isora**, etc.

**B. Southern tropical Semi-evergreen Forest Type :**

This type of forest is seen in parts of Muppene, Attigodu Satate Forests. The important species found are, **Lagerstroemia lanceolata**, **Careya arborea**, **Emblica officinalis**, **Randia** species, **Syzygium** species, **Terminalia** species, **Vitex altissima**, **Mangifera indica**, **Artocarpus** species and Bamboos in patches.

Good patches of shola forests are found in the Karni Reservir Forest of the sanctuary.

**FLORA :** This sanctuary consists of multitiered vegetation that belongs to tropical evergreen type to moist deciduous type. We can clearly observe lower, middle, top canopies, under growth and climbers. There are few areas where human interference is very low. On the fringes of villages the forest area has been degraded due to human interference as well as cattle pressure. The following are the species commonly seen in the area.

### **TOP CANOPY:**

|     | <b><u>Botanucal Name</u></b> | <b><u>Common Name</u></b> |
|-----|------------------------------|---------------------------|
| 1.  | Diptoerocarpus Indicus       | Dhupa                     |
| 2.  | Peciloneuron Indicum         | Balgi                     |
| 3.  | Calophyllum temontosum       | Surahonne                 |
| 4.  | Hopea Parviflora             | Kiralbogi                 |
| 5.  | Machilus macrantha           | Gulmavu                   |
| 6.  | Palaquim ellipticum          | Pali                      |
| 7.  | Actrocarpus fraxinifolious   | Balangi                   |
| 8.  | Bischofia iavanica           | Nerulli                   |
| 9.  | Terminalia paniculata        | Hunalu                    |
| 10. | Terminalia temontosa         | Mathi                     |
| 11. | Lagarstroemia lanceolata     | Nandi                     |
| 12. | Lophopetalum wightianum      | Bolpole                   |
| 13. | Mangifera indica             | Mavu                      |
| 14. | Vitex altissima              | Naviladi                  |
| 15. | Acroacarepous hirusta        | Hebbalasu                 |
| 16. | Bombax ceiba                 | Boorga                    |
| 17. | Schlechera oleosa            | Sagada                    |
| 18. | Alstonia scholaris           | Hale                      |
| 19. | Syzygium cumini              | Nerale                    |
| 20. | Petrocarpus marsupium        | Honne                     |
| 21. | Dalbergia Latifolia          | Beete                     |

### **LOWER CANOPY:**

|    |                      |          |
|----|----------------------|----------|
| 1. | Myristica malabarica | Rampatre |
| 2. | Caryota urens        | Bhagane  |
| 3. | Elaeocarpus serratus | Maite    |
| 4. | Aporasa lindleyana   | Sarali   |
| 5. | Holigarna caustica   | Holegaru |
| 6. | Fagara budrunga      | Jumma    |
| 7. | Dillenia pentagyna   | Kanagalu |

|     |                      |           |
|-----|----------------------|-----------|
| 8.  | Olea dioica          | Akkasale  |
| 9.  | Careya arborea       | Kavalu    |
| 10. | Emplica officinalis  | Nalli     |
| 11. | strychnus nux-vomica | Kasaraka  |
| 12. | Cinnamum zeylanicum  | Dalchinni |
| 13. | Randia dumatorum     | Kare      |
| 14. | Xylia xylocorpa      | Jamba     |

#### **UNDER GROWTH**

|    |                           |           |
|----|---------------------------|-----------|
| 1. | Strobilanthus Species     | Gurgi     |
| 2. | Calamus species           | Betta     |
| 3. | Clerodardron Infortunatum | Taggi     |
| 4. | Helectres Isora           | Kavali    |
| 5. | Acacia Intia              | Kaduseege |

### **C. PLANTATIONS:**

#### **2.6.2. ANIMALS:**

##### **2.6.2.1. Vertebrates, their status distribution and habitat:**

A casual visitor to the sanctuary will be disappointed by the apparent absence of animals except for the raising and falling resonant trill of cicadas and in some parts of blood sucking leeches in monsoon and the rapacious ticks in summer. Given that, travel in the forest is never silent, most creatures are either hiding or have vacated long before our arrival. In reality, the sanctuary fabulously rich in animal life. They show their presence with unusually with their colours, smells, movements and noises, which will penetrate the wall of the green and distinguish each animal from thousand of other species with which it shares the forest. They use distinctive signals to communicate. Many are adopted nocturnal habit.

Almost all the kinds of wild animals found in southern India are found in the sanctuary.

### **A. Prey Animals:**

There are several kinds of animals in the sanctuary including carnivores, herbivores, omnivores and aquatic animals. The following are the important wild animals found in the sanctuary.

- a. **Spotted Deer:** **(Axis axis)** The Sanctuary contains fairly good number of spotted deer in the Eastern portion i.e., in Muppani S.F. and Madenur area. They are usually in herds of 5 to 10.
- b. **Sambars :** **(Cervus unicolor)** These animals are fairly distributed throughout the sanctuary. Their concentration is more on the western portion of the sanctuary.
- c. **Indian quars:** **(Bision)** **(Bos gaurus)** This sanctuary has an appreciable population of Bisons. Their concentration is more on the fringes of Linganamakki, Thalekalale reservoirs, Attigodu R.F., Muppani R.F. and Madainur area. They are usually seen in herds of 10-15. They feed on grasses and strobilanthus.
- d. **Indian Wild Boar:** **(Sus scrofa)** They are distributed fairly well throughout the sanctuary.
- e. **Indian porcupine:** **(Hystrix indica)** Satisfactory population is seen in the sanctuary.
- f. **Barking Deer:** **(Munticus muntic)** These animals are mostly seen in evergreen type of forests in Govardhanagiri R.F. and Karani R.F. They are generally seen as solitary animal and some times in pair.
- g. **Mouse Deer:** **(Tragulus meminna)** The sanctuary was known for mouse deer, some decades back, they were not only hunted by local people but also by the people from outside. Their numbers are slowly increasing in the recent years.

- h. **Lion tailed macaque:** **(Macaca silenus)** This rare and endangered species can be seen in Govardhanagiri R.F. and Karani R.F. 3 to 4 groups are reported in this area.
- i. **Common Langur:** **(Presbytis entellus)** and Bonnet Macaque **(Mecaca radita)** : These animals are very common throughout the sanctuary.
- j. **Hare:** **(Lepus nigrecolia)** They are quite common in the area.

#### **B. PREDATORS:**

- a. **Tiger:** **(Panthera tigris)** As per Census, there are 4 Tigers in the sanctuary, but this number is on the lower side.
- b. **Panther:** **(Panthera Pardus)** : Their strength is quite satisfactory. This sanctuary is known for black panthers which are often seen in Govardhanagiri SF crossing the Kogar Bhatkal road during night time.
- c. **Indian Wild Dog:** **(Cuon alpinus)** There are good number of Wild dogs in Govardhanagiri and Karani R.F. areas. They feed on Langurs, Deer, Barking Deer, Sambars etc.,
- d. **Python :** **(Python moluras )** and King Cobras **(Naja naja)** : The sanctuary is having pythons and King Cobras in good numbers.

#### **C. SCAVENGERS:**

Jackals and vultures are scavengers of the sanctuary.

#### **D. AQUATIC HABITAT:**

The Sharavathi Reservoir bordering the sanctuary has a good population of otter, fishes and crocodiles. Water birds like cormorants and snake birds visit the reservoir.

### **E. AVIFAUNA:**

The sanctuary has a good population of birds like grey jungle fowl, peacocks, wood peckers, fly catchers, king fisher, whistling teal, bulbuls, Maina, Bee eaters, Drongo etc.

### **F. OTHER ASSOCIATES:**

- a. **Indian Elephants: (Elephas maximums)** There is no elephant in the sanctuary. It is said that a lone elephant which is in Mookambika wildlife sanctuary. (The Karani S.F. of this sanctuary is having the common border with the Mookambika Wildlife sanctuary).
- b. **Sloth Bear: (Melursus ursinus)** Sloth bears are quite common in the sanctuary. They feed on fruits and honey. They eat insects by dissecting decaying fallen fire wood and timber.  
The other animals found in the area are Malabar Squirrel, Crocodiles, Pangolin etc.,

### **LIST OF ANIMALS FOUND IN SHARAVATHI WILDLIFE SANCTUARY**

| <b><u>COMMON NAME</u></b>      | <b><u>ZOOLOGICAL NAME</u></b> |
|--------------------------------|-------------------------------|
| 1. Tiger                       | Panthera tigris               |
| 2. Panther ( Normal and Black) | Panthera pardus               |
| 3. Wild Dogs                   | Cuon alpinus                  |
| 4. Wild cats                   | Felis chaus                   |
| 5. Malabar civets              | Viverricula indica            |
| 6. Hyena                       | Hyena hyena                   |
| <b><u>HERBIVORES</u></b>       |                               |
| 1. Sambar                      | Cervus unicolor               |
| 2. Barking Deer                | Muntiacus muntjac             |
| 3. Spotted Deer                | Axis axis                     |
| 4. Musk Deer                   | Moschus moschiferus           |
| 5. Black naped hare            | Lepus nigricolis              |

- |    |                    |                  |
|----|--------------------|------------------|
| 6. | The gaur ( Bison ) | Bos gaurus       |
| 7. | Mouse Deer         | Tragulus meninna |

**SCVANGERS:**

- |    |        |             |
|----|--------|-------------|
| 1. | Jackal | Canis aurus |
|----|--------|-------------|

**RAPTILES:**

- |    |                     |                    |
|----|---------------------|--------------------|
| 1. | Land monitor lizard | Veranus grisens    |
| 2. | Python              | Python molurus     |
| 3. | King Cobra          | Naja naja          |
| 4. | Tortoises           | Geochelone elegars |

**OTHER ANIMALS:**

- |    |                        |                     |
|----|------------------------|---------------------|
| 1. | Flying Squirrel        | Refuta indica       |
| 2. | Giant malabar squirrel | Benus hylopetus     |
| 3. | Indian Porcupine       | Hystrix indica      |
| 4. | Common langur          | presbytis enstellus |
| 5. | Bonnet monkey          | Macaca radiata      |
| 6. | Lion tailed maeaque    | Macaca slenus       |
| 7. | Sloth bear             | Melursus ursinus    |
| 8. | Wild bear              | Sus scrofa          |

**Birds found in Sharavathi Valley Wildlife Sanctuary:**

- |     | <b><u>Common Name</u></b> | <b><u>Zoological Name</u></b> |
|-----|---------------------------|-------------------------------|
| 1.  | Jungle Myna               | Acridotheres fuscus           |
| 2.  | Common Myna               | Acridotheres tristis          |
| 3.  | Hoope                     | Upupa epops                   |
| 4.  | Red Whiskered Bulbul      | Pyenonotus jocosus            |
| 5.  | Red Vaned Bulbul          | Pyenonotus cafer              |
| 6.  | Little cormorant          | Phalacrocorax nigir           |
| 7.  | Darter                    | Anbing rufa                   |
| 8.  | Little Egret              | Egretta grazetta              |
| 9.  | Cattle Egret              | Bulbulcus ibis                |
| 10. | Large Egret               | Egretta alba                  |
| 11. | Adjutant stork            | Leptopilos dubius             |



|     |                            |                                    |
|-----|----------------------------|------------------------------------|
| 12. | White necked stork         | <i>Ciconia episcopus</i>           |
| 13. | White Ibis                 | <i>Threskiornis melanocephalus</i> |
| 14. | Brahmini kite              | <i>Haliastur indus</i>             |
| 15. | Grey Jungle fowl           | <i>Gallus sconerata</i>            |
| 16. | Pea fowl                   | <i>Pava cristaus</i>               |
| 17. | Purple moorahen            | <i>Porphyrio porphyrio</i>         |
| 18. | Pheasant tailed jacana     | <i>Hydrophasianus chrurgus</i>     |
| 19. | Red whattled lapwing       | <i>Vanellis indicus</i>            |
| 20. | Spotted dove               | <i>Streptopelia chinenisis</i>     |
| 21. | Blue rock peigion          | <i>Columba livia</i>               |
| 22. | Indian lorikeet            | <i>Lsricula vernlis</i>            |
| 23. | Rose ringed parakeet       | <i>Psittacula krameri</i>          |
| 24. | Indian cuckoo              | <i>Cuculus micropterus</i>         |
| 25. | Common grey Hornbill       | <i>Tockus birostris</i>            |
|     | <b><u>COMMON NAME</u></b>  | <b><u>ZOOLOGICAL NAME</u></b>      |
| 26. | Malabar pied Hornbill      | <i>Anthracocorus coronatus</i>     |
| 27. | Green Indian Hornbill      | <i>Busceres bicormis</i>           |
| 28. | Green Barbet               | <i>Meglaima zeylanica</i>          |
| 29. | Blue Throated barbet       | <i>Melaima</i>                     |
| 30. | White wagtail              | <i>Motacilla able</i>              |
| 31. | Scarlet minivet            | <i>Pericroctus flammeus</i>        |
| 32. | Grey Indian Shrike         | <i>Lanius</i>                      |
| 33. | Paradise fly catcher       | <i>Terpsiphone paradisi</i>        |
| 34. | Magopi robin               | <i>Copsychus saularis</i>          |
| 35. | Tailor Bird                | <i>Orthotomus sutorius</i>         |
| 36. | Purple Sunbird             | <i>Nectarinia asiatica</i>         |
| 37. | White backed munia         | <i>Lanchura striata</i>            |
| 38. | Golden oriole              | <i>Oriolus oriolus</i>             |
| 39. | Black Drango               | <i>Dicrurus adsimilius</i>         |
| 40. | Large Racket tailed Drango | <i>dicrurus paradiseus</i>         |
| 41. | Jungle Crow                | <i>Corous macrorphynchos</i>       |

- |     |               |                    |
|-----|---------------|--------------------|
| 42. | Crow pheasant | Centropus sinensis |
| 43. | Jungle bablar | Turdoidea striatus |

#### **2.6.2.2. The limiting factors**

The sanctuary has 24 villages inside the sanctuary. - people and - cattle stay inside the sanctuary. The size of the revenue enclosure, vary from few house hold to a maximum of 30 house hold. The majority of the houses are Mangalore tiled and few are thatched. There are very few RCC buildings. 95% of the people are dependent on agriculture. People also encroached forest land mainly for cultivation purpose. Illicit felling of trees inside and outside the sanctuary has come down drastically over the years and it is almost nothing now.

**2.6.2.3. Important invertebrates, their status, distribution and habitat:** The invertebrates fauna found in Sharavathi valley wildlife sanctuary are butterfly, beetles, snakes, crabs, cockroaches, earth worms, ants, termites, honeybees, scorpions, leeches etc., their endemic status and distribution is yet to be studied.

## CHAPTER -3

### HISTORY OF MANAGEMENT

#### **3.1: General:**

Western Ghats are known for their luxuriant vegetation and reputed timbers from very early history. Timber was exported from west coast of India in large quantities to Arabia and Persia for many centuries. Ownership of forests, as a tradition, was claimed by the de-facto rulers of the time. From the available historical records, it does not appear that, there was a separate establishment at any time to look after the forest management, nor there was any system in operation for the felling of trees until the British time. Ruling classes generally exercising power over selected species of trees by reserving them to the crown and prohibiting public from felling them. Different rulers exercised this prerogative in different ways. To a large extent, this prerogative was sold in auctions and leases to traders who were then give access to forest to cut and remove timber. They also sold blocks of forest for a certain sum down or rate per tree and the timber merchants were allowed to fell trees as they pleased. Some rulers attempted, through a specially established setup, to extract timber of reserve kinds, organize depots and conduct periodic sales.

During 20<sup>th</sup> century forest came to be organized very systematically, elaborate reporting by eminent officers about the waste full destruction of forest well preceded reservation of large areas of forest began. Working plans were prepared for very small and commercially attractive pocket of the reserved forests. Government monopolized the timber to the exclusion of local people, who had sufficient resource in un-organized forest area. Every act of local public including removal of dry leaf, hatch grass for agriculture, grazing, collecting of minor forest produce etc., were closely scrutinized and several un successful attempts were made to bring down the pressure on the forest.

This sanctuary area previously came under the control of the princely State of Mysore. The Mysore Kingdom had shown keen interest towards the protection of forests, and for better management of forests and wild-life, all the forest areas had been declared as State then,

these forests during 1905-1920. Since then, these forests have been managed in a systematic way ..

During 1964-65, Linganamakki reservoir was constructed across the Sharavathi river which led to submersion of many villages. The people affected by this hydro-electric project were shifted from the project area and allowed to settle in various other places.

After the enactment of the Wildlife (protection) Act, 1972 and Forest Conservation Act, 1980, more emphasis has been given for protection of Wildlife and in creating awareness among the people about the need to conserve Wildlife sanctuary. Then onwards the protection and development activities towards the better management of wildlife in the sanctuary were commenced and continued by the Wildlife wing of the Forest Department. With the handing over of the sanctuary to the wildlife to the Wildlife wing by the territorial wing, these activities have been further intensified in a systematic way.

Wildlife management is a refreshingly multi dimensional and multi disciplinary study with over tones of constitutional, legislative and judicial strands makes it unique, synthetic and zeal oriented for restructuring, reorienting and revamping vanishing wildlife.

Sri Ashok B Basarkod, Deputy Conservator of Forests, Wildlife Division, Shimoga had prepared the existing management plan for a period of 5 years from 2001-02 to 2005-06. The plan was oriented towards creation of water resources, habitat improvement and creation of infrastructure etc. The objectives are partially implemented and there is a need to continue the above mentioned objectives in this management plan period also, for the period of 2006-07 to 2015-16.

## **3.2: TIMBER OPERATIONS INCLUDING BAMBOO AND FIRE WOOD HARVEST:**

### **3.2.1: Silvicultural systems and tending operation:**

The sanctuary has got a number of good timber species viz. Honne, Nandi, Matti, Hunalu etc. At present timber harvesting is stopped and it is mainly conservation oriented. Previously these areas were worked by clear felling for raising plantations. Plantations were

earlier raised by the Mysore Paper Mills Ltd., Karnataka Forest Development Corporation have handed over the plantations to the wildlife division.

**3.2.2: Even aged systems and uneven aged systems:** There is no extraction of dead and fallen timber or fire wood, no extraction of bamboos, and no clear felling of plantations raised inside the sanctuary.

**3.2.3: Bamboo working:** There is no Bamboo working in the sanctuary.

**3.2.4: Fire wood harvest and collection:** There is no fire wood harvest and collection in the sanctuary.

**3.3: Non wood forest produce (NWP) collection:** There is no non wood forest produce collection in the sanctuary:

**3.4: Leases:** There is no lease in the sanctuary.

**3.5: Other programmes and activities:** Apart from the Management of the sanctuary, programmes like eco-tourisms, eco-developments, Research and Monitory, Protection of habitat has been introduced in the sanctuary.

**3.6: Forest protection:**

**3.6.1: Legal status:**

Sharavathi Valley Wildlife Sanctuary was notified vide Government order No. AFD70/FWL71/ Dated 20.04.1972 and has an area of 431.23 Sq. Kms. with a final notification No. AFD 12 FWL 74 Dated: 27.06.1974. A Wildlife Division has been functioning independently since 01.08.1993 after taking over of 6 State Forests, submersion area and islands, from Sagar Territorial Division.

Details of State Forests and other areas coming under sharavathi Valley Wildlife Sanctuary are as follows.

| Sl. No. | Name of the forest | Legal status | Block No. | Compartment No. | Area in Ha.     |
|---------|--------------------|--------------|-----------|-----------------|-----------------|
| 1       | Govardhanagiri     | SF           | XX        | 1-34 (34)       | 13473.68        |
| 2       | Karini             | SF           | XXI       | 1-17 (17)       | 5102.53         |
| 3       | Muppane Bl. A      | SF           | XIX       | 4,5,6,7 (4)     | 961.77          |
| 4       | Muppane Bl. B      | SF           | XIX       | 8,9,10,11 (4)   | 629.16          |
| 5       | Channagonda (part) | SF           | XIX       | 13 (part)       | 701.05          |
| 6       | Attigodu           | SF           | XIX       | 1,2,3 (3)       | 763.70          |
| 7       | Submerged area     |              |           |                 | 12363.00        |
| 8       | Islands            |              |           |                 | 507.00          |
| 9       | Others             |              |           |                 | 8621.11         |
|         |                    |              |           | <b>TOTAL:-</b>  | <b>43123.00</b> |

**Govardhanagiri SF:** This was notified as state forest in June 1908. Because of the inaccessible nature in the terrain, there was little demand for timber from this forest and any serious attempt at the exploitation of timber does not seem to have been made until 1910-11. Since then, some felling have been made in the neighbourhood of Nagavalli and CHanekodlu under the method of selection fellings according to which all exploitable trees above the prescribed grith limit were felled.

The Sanctuary was declared vide preliminary notification No. AFD.70.FWL-71, Dated 20.04.1972 of Govt. of Karnataka (Annexure – I) and final notification No.AFD 22 FWL 74 Dated: 27.06.74 The boundaries of the Sanctuary are as follows.

- NORTH** : Jog S.F., Thalakalale Reservoir and Karagal S.F. forms the northern boundary of the Sanctuary.
- EAST** : Eastren boundary of Sharavathi Reservoir forms the Eastern boundary of the Sanctuary.
- SOUTH** : Mukambika Wildlife Sanctuary and North Canara District boundary from the southern boundaries.

**WEST** : Common boundary of Shimoga and North Canara district forms Western boundary of the Sanctaury.

**3.6.2. Hunting:** There are few number of licensed crop protection guns inside the sanctuary. These weapons are some times used for poaching of deer, wild boar, birds. Now due to more awareness among the local people, more intensive patrolling by the department, the poaching is negligible or nil.

### **3.6.3. ILLEGAL ACTIVITIES:**

**3.6.3.1. Poaching:** There are few number of licensed crop protection guns inside the sanctuary. These weapons are some times used for poaching of deer, wild boar, birds. Now due to more awareness among the local people, more intensive patrolling by the department, the poaching is negligible or nil.

**3.6.3.2. Illegal cutting of tree:** There are 24 villages inside the sanctuary. The population is less when compared to other areas. And the area is undulating and hilly. Hence, there is no much illegal activities of tree cutting.

**3.6.3.3. Illegal removal of NWP:** Due to the presence of villages and settlements inside the sanctuary, the people are collecting the NWP for their bonafide purposes in minor quantities.

**3.6.3.4: Encroachment and other illegal activities:** There are about 26 families and 21.92 Ha of encroachment after 1978 and as per records there is no encroachment before 1978. These figures are provisional. Detailed survey may change the figures. Presently the encroachments have come to a grinding halt. But retrieving the lost forest land is still incomplete. Some of these encroached land are deep inside the forest and constitutes small pockets of land. The encroachers tend to interfere with the flora and fauna around these encroachments and as a result, the zone of influence around such pockets is disproportionately large. Eviction proceedings are under way as per law.

**3.6.4: Domestic live stock grazing:** For long time in the early history, cattle were regarded as wealth. Though not to the same extent, the situation now also remains same in the sanctuary area. There are no sheep, goats, donkeys, horses and pigs with in the sanctuary but the cattle including cows and buffalos are in good numbers. The cows and bulls belong to a non descript breed known as “Malenad giddas”. They are smaller in size with stunted growth and have no definite breed character spics. These animals have for centuries been playing an important role in the rural economy of the region. Farmers spend practical nothing towards the feed.

Of late, these animals are used mainly for generating farm yard manure and partly to generate income during hard times by sale of calves. Farm yard manure is generated by providing a bed of dry leaves in the cattle sheds where these animals are made to stand day after day urinating and defecating in the same place for weeks. The manure so generated is taken out of the shed once in 2 to 3 months. It is impossible for any other breed of cattle to under go this ordeal and still survive.

**3.6.5. Wild fires:** Fire is a great threat in the sanctuary as it consists of grassy blanks main emphasis is to be given for the protection of grassy blanks and protection of shoals. Usually the fire appear during the end of January till the end of May.

More number of people and jeeps are deployed in addition to the regular staff to fight against the fire. Almost the entire regular establishment is devoted to fire protection works for the period of five months from January. The strategy is locating groups of people, to detect and put off the fire around fire prone locations has proved successful. Although it is not possible to detect the offenders, in all the fire incidents it can reasonably presumed that the local people, to get fresh green grass for their cattle, kindle fires in a large measure. There are a few retaliatory fires especially to scare away the wild pigs. There is no major damage to the natural tree vegetation in the last five years. Even the dried bamboo area is more susceptible for fire. Given the present circumstances the number of fires and their spread can be controlled to certain extent by better organization and communication, but it can not be eliminated totally.



**3.6.6: Insect attacks and pathological problems:** There is no insect attacks or pathological problem found in the sanctuary.

**3.7. TOURISM:** Many tourists all over the country and from abroad visit the world famous, spactular Jog falls is just 5 Km away from the sanctuary boundary. Most of them will be interested in visiting the sanctuary.

The sanctuary is open throughout the season, but best time for wildlife viewing is between November and May.

**a. Sassechowki Area** -Comes in tourist zone having moist decidious and semiever green forest area adjacent to sharavathi back water. Area is well developed, sufficient roads are formed, planted with fruit yielding species. Grassy area attracts gaur and spotted deers, which are viewed here by the visitors.

**b. Muppane Nature camp:-** This is also in forest zone of Muppane RF and three sides area are covered with sharavathi back water and having attractions to the visitors, students and public all over the state visit this spot. This nature camp is having all basic facilities like tent basis, tents, camp cots, beds, utensils for cooking, kitchen building, toilet facilities, drinking water and one interpretation hall. Basic information is provided by dipicting maps, publicity bopards. Trekking path is formed to take visitors inside the forest to know different trees, view since beauty of back water. Holding awareness programme, inviting students, having many more nature camps by providing relevant books, brochures, pictures, film show on nature and wildlife, is necessary and to be taken up seriously.

**c. Holebagilu “Prakruthi” van:-**This place is 32 Km away from Sagar and 103 Km from Shimoga which is adjacent to the sharavathi back water area. About 5 Acres area is fenced and one paragola is constructed to the benefit of the visitor. Boards are erected and slogans are written. Benches are provided, so that tourist can spend some time and enjoy the beauty of back water before they board in to ferry to visit the famous “Sigandur Devi” temple. Adjacent to this area about 1.5 Km. of Madenur forest area is fenced with chain link mesh with the financial

assistance of Zilla panchayath, Shimoga. this has helped to stop the movement of wildlife towards roadside and made them centralise in the same area and breeding place. This has helped to view the wildlife particularly gaur and spotted deers in herds.

**d. Kanor Kote:-** This is a place of historical importance built by Rani Abbakka Devi popularly known as "Pepper Queen" in the XVI century. From this fort visitors can see the panoramic view of Bhatkal and Arabian sea. This place is full of wild pepper grown naturally and was pepper collection centre. This is situated in Govardhanagiri RF of evergreen forest area 43 Km away from Jog. Passing through forest patches during summer to reach this spot one feels that he is getting through many air condition units.

**e. Dabbe Falls:-** This water falls recalls the memory of Jog falls almost a height of 300' which is 29 Km away from Jog and best for trekking.

**f. Channekal falls:-** This place is 45 Km away from Jog and road side of Kogar to Bhatkal. All most all tourist stop here and spend some time playing with water by enjoying the scenic beauty of evergreen forest.

**g. Beemashwara Temple:-** This temple is in Govardhanagiri SF on the right side of Kargal Bhatkal road near Kogar at a distance of 34 Km. from Jog. This is situated in dense forest and a walk 1- 1.5 Km inside deep forest to reach this temple is memorable one of visitors pay visit to this temple.

**h. Yedigudda:-** This is the highest point of 1102 m from MSL at Govardhanagiri SF situated for trekking purpose. Above many wildlife and beautiful butterflies. From this point visitors can see the forest areas, panoramic view of Arabian sea.

Apart from these main tourist spots, tourist expenses more in observing diversified flora and fauna of tropical forest in western ghat.

**The following are the objective of tourism**

- I. To spread the message regarding the need to preserve all forms of flora and fauna, to enable the public to see and appreciate the rich heritage of the country.
- II. To educate the people especially those living near the sanctuary regarding the need to maintain such sanctuary and thereby enlisting their co-operation.
- III. To inculcate in the minds of the children to love all forms of wild life and need for conservation of natural resources.
- IV. To provide wilderness experience to genuine enthusiasts in particular and to the public in general.
- V. To provide for recreation and adventure sporting.

Tourist visits should be maximum for enjoyment observing wildlife and to have concern for nature conservation.

At present the sanctuary has two forest bungalows, one at Jog and another at Nagavalli. There are two watch towers in the sanctuary. The following can be developed to encourage tourism.

**3.7.1. Nature Education Camps and Picnics.** Nature camps are mainly meant for young groups, school children etc. At present one nature camp is being developed at Muppane. Functional facilities, like cooking, drinking water facilities, large open space, a small library, audio visuals etc., are necessary to entertain the groups for two three days. Low cost books, stickers, photos etc., on environment, wildlife, forest may be supplied to the participants. A detailed permanent map of the sanctuary, resource for regular talks, and local guides are necessary for each camp. The activities for visitors may include trekking, wildlife viewing from watch towers, collection of Antlers, feathers, identification of plants, bird watching, painting etc.

### **3.8: RESEARCH, MONITORING AND TRAINING:**

**3.8.1: Research and Monitoring:** Various aspects of the sanctuary need to be studied continuously. It is desirable to have census of wildlife once in five years. Ecological changes are too slow and imperceptible. Specialist like animal ecologist, botanist, veterinarian, and sociologist are necessary to probe. Research should cover:

- Spatial distribution of animals, population dynamics, seasonal migration, animal health and diseases.
- Habitat monitoring, check list of food plants, physical and phonological changes in vegetation quality and quantity of discharge in streams and rivulets, biotic disturbance.
- Sociological research on the local people and the interface between the vegetation, animals and people.

**3.8.2: Training:** At present training programmes are not under taken in the sanctuary. It is essential for the staff and officers of the protected area to be trained. And also research scholars from the university may be asked to take up the project work on flora and fauna in the protected area.

**3.9: Wildlife conservation strategies and their evaluation:** Through a series of measures, most of the objectives set out in the previous plan are achieved. Sanctuary is now totally free from timber extractions operations. Protection level is enhanced. Poaching has come down drastically. The forests have been regenerating very satisfactory. So faunal density is also growing appreciably. Constitution of the sanctuary and the restrictions thereon are also adequately publicized. The sanctuary is now at a crucial stage of take off. For achieving the plan objectives, the following strategies are necessary.

1. Provide for an efficient administration and effective protection.
2. Zonation of the sanctuary and zone wise prescriptions.
3. Habitat consolidation boundary.
4. Tourism.
5. Mitigate the external pressure.

**STRATEGY-1: Protection:** Proposals have been sent to the higher officers for reorganization of sections and beats. The work of blocks and compartment has to be re-do in the field level to identify and to monitor the sections and beats effectively.

**STRATEGY-2: Habitat consolidation:** The Sanctuary was declared vide preliminary notification No. AFD.70.FWL-71, Dated 20.04.1972 of Govt. of Karnataka (Annexure – I) and final notification No.AFD 22 FWL 74 Dated: 27.06.74.

**REHABILITATION OF INHABITANTS:** There are 24 villages inside the sanctuary. The influence of the inhabitants and their cattle on the sanctuary will be humanly impossible because of their wide distribution and numbers. Conversely, the sanctuary will put the local people to lot of difficulties because of restrictions on rural development and wild animal’s depredation in the interest of people’s future developments, relocation and rehabilitation package needs to be offered to those who are willing to accept this. It may not be possible to rehabilitate all the inhabitants at one time. Therefore it may be taken up in stages. Otherwise the following action may be initiated. At present it very difficult to rehabilitate these villagers against their will. In order to restrict to their present hamlets and agricultural fields, it is very important to survey and demarcate the existing cultivated lands and the hamlets being occupied by them. The boundaries of the sanctuary and the enclosures will be marked using appropriate stone pillars and by digging of cattle proof trench.

**STRATEGY-3:**

**Park zonations:** The sanctuary has been divided in to three zones based on the utility.

1. Core Area or Core Zone.
2. Buffer Area or Buffer Zone.
3. Tourism Area or Tourism Zone.

**Zones and their extent:**

| Zone         | Forest             | Compt           | Extent in Ha. |
|--------------|--------------------|-----------------|---------------|
| Core zone    | Karini SF          | XX -1 to 7 (17) | 5102.53       |
| Buffer zone  | Govardhanagiri SF  | XX – 1 to 34    | 13473.68      |
| Buffer zone  | Channagonda SF (P) | XIX – 13 (P)    | 701.05        |
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| Tourism zone | Muppani SF Bl. A   | XIX – 4 to 7    | 961.77        |
| Tourism zone | Muppani SF Bl. B   | XIX – 8 to 11   | 629.16        |
| Tourism zone | Sharavathi         |                 | 12363.00      |

|              |                                    |                |                 |
|--------------|------------------------------------|----------------|-----------------|
|              | submerged area                     |                |                 |
| Tourism zone | Islands with in the submerged area |                | 507.00          |
|              | Others                             |                | 8621.11         |
|              |                                    | <b>TOTAL:-</b> | <b>43123.00</b> |

**STRATEGY-4: Eco-Tourism:** By definition eco-tourism is a responsible travel to natural areas that helps conserve the environment and sustains the well being of local people.

**Objectives:**

1. To spread the message regarding the need to preserve all form of fauna and flora and enable the public to see and appreciate the rich heritage of our country.
2. To educated the people especially those living nearby the sanctuary areas regarding the need to maintain such sanctuary and thereby enlisting their co-operation.
3. To inculcate in the minds of children love for all forms of wildlife and need for conservation of natural resources.
4. To provide wilderness experience to genuine enthusiasts in particular and to the public in general.
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Tourist visits should maximize people’s enjoyment and increase visitors concern for nature conservation. Without a well laid policy and guided programme, public tend to be ritualistic. Tourist facility should be so laid as to be accessible by public transport. A range of choices are necessary to suit different visitors. But providing rest and tranquility is common to all.

At present there are two forest bungalows at Jog and Nagavalli respectively. The following can be developed to encourage tourism.in addition there is nature camp developed at muppane.

**STRATEGY-5: Eco-Development:** The programme is aimed at mitigating the problems of the people living around the sanctuary, who exert pressures on the sanctuary resources for their bona fide utilities, such as firewood, small timber, fodder and grazing lands and also suffer from the crop damages and cattle kill by wild animals. The objectives of the programme are to create alternative resources to the people living in and around the area. To relieve their dependency, to reduce pressure on the sanctuary and also to improve their socio economic conditions, so that they will co-operative with the wild life authorities in management of wildlife and the eco system.

The objectives of the eco development are as follows.

1. To reduce the pressure of the people on the protected areas like fuel wood, small timber and NTFP by making themselves sustained in their basic needs.
2. To improve the eco system and their bio diversities in the impacted zone.
3. To create alternate sources for the natural resources.
4. To improve the socio economic conditions of the people depending upon the sanctuary resources for sustenance and also to provide employment and income generating jobs to needy people.

### **3.10: ADMINISTRATIVE SETUP:**

**Organization of forest area:** Each of the state forests, which forms a part of the sanctuary is quite big in size. Long back the state forests and minor forests existing inside the sanctuary was marked to blocks and compartments. Over a period time the block boards and compartment boards destroyed and there is a necessity to once again survey the area and to fix the new compartment and block boards. Demarcation of compartment boundary and beat boundary has to be marked on the map.

**Administration:** At present management and administrative control of Sharavathi valley wildlife sanctuary is done by Shimoga wildlife division, with head quarters at Shimoga. The existing staff pattern is as follows.

**A. Staff pattern of Sharavathi valley wildlife sanctuary:**

| Sl. No. | Staff                         | Sanctioned posts | Existing post | Vacant |
|---------|-------------------------------|------------------|---------------|--------|
| 1       | Deputy Conservator of Forests | 1                | 1             | -      |
| 2       | Asst. Conservator of Forest s | 1                | 1             | -      |
| 3       | Range Forest Officers         | 2                | 2             | -      |
| 4       | Foresters                     | 5                | 4             | 1      |
| 5       | Forest guards                 | 8                | 2             | 6      |
| 6       | Forest watchers (MR)          | 14               | 14            | -      |
| 7       | Driver (MR)                   | 2                | 2             | -      |

**B. Details of Sections, Beats:**

| Sl. No. | Name of the Range | Sections                | Beats      |
|---------|-------------------|-------------------------|------------|
| 1       | Kargal WLR        | Aralagodu               | Aralagodu  |
|         |                   |                         | Ambargodlu |
|         |                   |                         | Kargal     |
| 2       | Sharavathi WLR    | Biligaru                | Biligaru   |
|         |                   |                         | Kanuru     |
|         |                   |                         | Kogaru     |
|         |                   | Kogar                   | Karini     |
|         |                   | Nagavalli               | Meghane    |
|         |                   |                         | Nagavalli  |
|         |                   | Nagavalli checking gate |            |

Reorganization of Sections and Beats have been prepared and submitted to the higher officers for sanction accordingly.



### **3.11: COMMUNICATION:**

**Wireless network and telephones:** The sanctuary is provided with a good wireless network. There are three static wireless sets at range head quarters and Deputy Conservator of Forests office Shimoga and two mobile sets in the vehicles. And there are 9 No of walkie talkies distributed among officers, foresters and forest guards. Recently the frequency upgraded to high band and all the static, mobile and walkie talkies are replaced with new ones. The repeater station is powered by solar panels. The system works very efficiently and message emanating from any source is circulated over the entire network. The system has proved very helpful especially in fire season and in protection.

The divisional office and all the range forest offices are connected by telephones.

### **3.12: SUMMARY OF THREATS TO WILDLIFE:**

**General:** The sanctuary enjoyed a fair degree of protection on account of its populating density and nearby to Sagar. Staff provided originally for the management of the sanctuary is inadequate and some posts need to be shifted. A large number of posts remain unfilled. The principals under lining the protection is

- a. Providing protection to the natural flora and fauna against predation by human beings (smuggling, poaching, and encroachment).
- b. Management of fire.
- c. Protection of wildlife from live stock (communicable disease)
- d. Maintenance of boundary demarcation.
- e. Providing good communication to achieve all of above.
- f. Fencing to exclude domestic live stock from the area for the benefit of the wildlife.
- g. Creation and maintenance of fire breaks and fire lines.
- h. Conversion of monoculture exotic species plantation in to diversified wood lands.

**Significance of wildlife habitat:** Wildlife and wildlife habitat play a vital role in the ecological and biological processes that is essential to life itself. The functioning of the biosphere, and

hence the maintenance and enhancement of human life, depends on countless inter actions among plants, animals and micro organisms.

These ecological processes are essential for agriculture, forestry, fisheries and other endeavors necessary to human life. They also help maintain environmental quality by degrading and otherwise removing some pollutants and by preventing waste accumulation. Some of the biological processes in which wild species play a key role are pollination, germination seed dispersal, soil generation, nutrient cycling, predation, habitat maintenance, waste break down and pest control.

Wildlife habitat regardless of whether it is upland or wetland habitat, is significant because of a number of functions it performs to support wildlife. Wildlife needs adequate space and habitat for the following basic life requirements:

- Safe, undisturbed area for breeding, both on land and in the water.
- Shelter, which can be underground, in the soil, on the land surface, in water, or in trees and shrubs.
- Food supply, which may require suitable habitat for the plants and animals that provide the food supply.
- Migratory routes and
- Over wintering areas for those species that require seasonal migration for shelter or breeding.

**Establishing forest protection camp and intensive patrolling:** In view of better protection and control the original section and beats have been reconstituted and proposals have been sent. Good protection is possible by intensive foot patrolling in groups or teams. Protection will be easy if the field staff stay close to the forest. The forest protection camp should support every section forest officer. Each camp should consist of a group of three people and should be housed with in the sanctuary in appropriately built camp sheds. Permanent staff should join the camp team on shift duties and patrol the beats and section very intensively and regularly. Permanent staff should lead the protection camp staff. Ideal patrol team size should be four

people equipped with a weapon and wireless set. Establishing sufficient number of these camps and ensuring that all parts of the sanctuary are patrolled regularly is the most important aspect of protection.

List of places suggested for construction of semi permanent sheds is as under.

| Sl. No. | Range      | Locations                                   |
|---------|------------|---|
| I       | Kargal WIR | Aralagodu<br>Ambaragodu<br>Bidarur          |
| II      | Kogar WLR  | Kattinakaru<br>Biligaru<br>Kanuru<br>Kogaru |

The forest protection camp should be so designed to command a good view of the forest and should be accessible to the wireless network. Every camp should be provided with maps, minimum facilities for cooking, a weapon, a walkie, first aid kit and solar power. Free ration also have to be provided. Protection camps should attend to the problems relating to smuggling of timber, cattle grazing, fire, trekkers, litter, petty maintenance works etc. Each camp should maintain a daily movement cum observation register where in all kinds of information pertaining to the flora, fauna and offences should be registered.

**Fire management:** Fire plays a very critical role in the habitat management. One of the main factors that have accelerated the degradation of forest cover is the occurrence of the fire which has almost become an annual feature. The grazers, fire wood and NTFP collectors and tourist tend to set fire deliberately or by accident. Smugglers and poachers also set fire to the forest to divert the attention of field staff. Due to the forest fire the natural regeneration is lost and the forests are deprived of rich humus. Wild animals particularly herbivores are the worst sufferers for want of green foliages wild innumerable soil fauna will be destroyed, which play a very important role in maintaining the ecological balance by decomposing and releasing energy form plant and animals. Hence preventive and fire control measures have been given much importance in the habitat development. Considering all these factors the following measures are suggested.

1. Fire line clearance & maintenance.
2. Employing fire watchers during summer.
3. Erection of watch towers.
4. Communication systems like roads, wireless sets, walkie talkie sets, telephones etc.
5. Establishing anti poaching squad.
6. Establishing manned checking gates.
7. Supply of guns and ammunitions to the staff.
8. Protection from grazing.

**Creation and maintenance of fire breaks:** Fire breaks should be created along the highway margins, game paths, and areas which are sensitive to fire. The fire breaks should be of 4 meters width. Fallen trees on these lines should be cleared and disposed off. The network of game paths and patrolling tracks, act as permanent fire breaks and they should be so maintained by annually clearing the grasses and other weed growth in the month of December. Normally these belts are fire traced. If the work of clearing of fire breaks is under taken in late November or early December, it helps in generating a new flush of grass along the fire breaks. This work is found to be more effective than late clearance and fire tracing.

Fire zones are generally well known and therefore the required fire breaks have been identified and prescribed for annual clearing in the programme of work. The new fire breaks may be identified and created in the vulnerable forest area.

**Fire detection and control:** As the forest areas of the sanctuary is sloppy and hilly areas, the detection of fire is easy from a hill top. The places ideal for this purpose are:

1. Kargal Wildlife Range : Near Dabbe falls.
2. Sharavathi Wildlife Range, Kogar : Govardhanagiri SF and Yedigudda.

Permanent watch towers should be constructed at these stations. Staff should be positioned on them. These teams should be dispatched in the provided jeep to the scene of fire immediately on message to put out the fire. Road network should be developed in a manner to enable these teams to reach the fire spots as early as possible. The forest protection camp may also be appropriately redeployed to keep a check on the fires and avail their services. Wild fire spreads rapidly and exponentially. The number of fires can not be reduced substantially in the near future but the extent of fire damage can be brought under control. Fire protection staff and arrangements should be in place by middle of December and can be wound up by the end of April. During exigencies more parties can be engaged and hired vehicles can be used.

**Protection against grazing:** Grazing is directly related to the human habitations inside the sanctuary. So long the enclosures exist and people are allowed to continue in their traditional agricultural profession, rearing of cattle is necessary to support their livelihoods. A sustained campaign of bringing awareness among the inhabitants may slightly reduce the intensity of these activities but total control will only be possible when all the people are rehabilitated.

**Protection against encroachment:** The majority of the people who are living inside the sanctuary are less in population and few persons migrated from Kerala State and settled inside the sanctuary. The activities of these people have to be restricted.

**Protection from communicable diseases:** Although there was no record of epidemics to the wild animals, abundant precaution is necessary as any incident could wipe out the entire ungulate population. Immunization of cattle within the sanctuary as well as outside up to a radius of 3 Kms should be regularly done at Government cost. It is a permanent solution to the threat.

**Poaching:** Poaching of small game such as Indian hare, Barking deer is rather difficult to detect. Poaching of big game is not found. However vigil has to be maintained.

**Communication facilities - Wireless network:** For effective protection against theft, fire, grazing etc., good communication facilities are necessary. An efficient wireless network is already functional. Due to the addition to existing staff strength, sufficient numbers of walkie talkies are given to the front line staff. All the wireless equipments including the repeater station should be toned up and kept in good working condition round the year and especially during the fire season.

**Development and maintenance of patrolling track network:** A good road network is necessary to provide access to the remote areas. The existing road network has been developed keeping this aspect in mind. However there are still certain short comings and all problematic areas are not accessible. Therefore new patrolling tracks should be planned, aligned carefully and developed at the earliest. Wherever necessary, bridges and culverts should be built. The roads so formed should be interconnected.

**Boundary and “D” line maintenance:** External boundaries have to be maintained clearly and regularly. Demarcation pillars engraved with sanctuary title should be planted all along the boundaries. Maintenance of internal boundaries especially around the enclosures is also necessary so long the rehabilitation programme is not completed. Rationalization of the boundary and re-issue of notification is to be completed.

**Public education:** People who are living inside the sanctuary are to be educated about the long term consequences of fire especially in terms of loss of soft palatable grasses and poor water retention. So a sustained campaign of public education through hand bills, films, posters, display boards etc., should be taken up. Serious efforts are also necessary to try and convince them to reduce the cattle numbers. Effective steps should be taken to prevent cattle grazing inside the sanctuary. It should form a part of the duties of the forest protection camps to dry away the cattle if and when found in the sanctuary.

**Summary:** Protection is an important aspect until the rehabilitation of all inhabitants is completed and must be taken up with all seriousness. Sighting of animals is a direct indication of the degree of protection given. The present level of animal density is too low and unless ungulates are well protected, the possibility of carnivores going up in number is remote. As such the carnivore density is low and if ecological balance is to be restored, protection should be treated as a fundamental strategy in the over all management of the sanctuary.

## CHAPTER - 4

### **THE PROTECTED AREA AND THE INTERFACE LANDUSE SITUATION**

#### **4.1: The existing situation of the zone of Influences:**

**4.1.1: The location, extent, boundaries and natural attributes of the ZI:** The Sharavathi valley wildlife sanctuary is surrounded by malenad villages. On the northern side it bound by Honnavar taluk. On the eastern side it bound by Siddapra taluk. On the southern side it is bound by Sagar taluk. On western side it bound by Hosanagara taluk.

People have been living inside the sanctuary and in enclosures and drawing up on the forest for their daily needs. Therefore there is a zone of interference around each of these enclosures. The width of the zone depends on factors such as population size, extent of cultivated land, cattle population, size of land holding etc.

In addition there are many villages and settlements in a radial distance of 5 to 10 kms from the boundary of the sanctuary. There is more pressure on the sanctuary from outside villages because the number of people, cattle and cultivated land is many times more. They are also dependent on the sanctuary resources, be it water, grass, climbers, Bamboos, Fencing materials etc. Available forest cover with in this zone is surrogate measures of the biotic pressure.

**4.1.2.: Villages inside and outside the PA. Ethnic and identities, traditions, costumes, relationships between district groups of people, relationship with forests:** The sanctuary has 24 villages inside the sanctuary. - people and - cattle stay inside the sanctuary. The size of the revenue enclosure, vary from few house hold to a maximum of 110 house hold. The majority of the houses are Mangalore tiled and few are thatched. There are very few RCC buildings. 95% of the people are dependent on agriculture. People also encroached forest land mainly for cultivation purpose. Illicit felling of trees inside and outside the sanctuary has come down drastically over the years and it is almost nothing now.

**4.1.3.: The state of the peoples economy, vocations and land use:** Almost all the population in and around the sanctuary is based on agriculture. There are no big, small or home industries. 80% of the population is small and marginal farmers. Seldom people have disposable surplus income. Every family has a first preference to grow food grains for home consumptions. Only few families in addition to the agricultural land has areca gardens. However garden lands are looked after well irrespective of the returns because it keeps swinging widely and there is hope that it would be profitable day. Economic slump lade off a large part of agriculture labour force and therefore some of the male members migrate to near by towns for employment. But the number is small. The adverse effect of general economic situation is not harsh on the local people mainly because of stable monsoons and production of basic minimum food grain by each house hold.

**4.1.4.: Implications of the land use and resource dependency for the conservation of PA:** Lifestyle in Malenad region is such that people use fuel wood very liberally both for cooking and heating purposes. Fuel wood consumption is therefore quite high. As a preparatory to the monsoon, every house hold collects 4 to 5 cart loads of dry fire wood, either round or split and nearly consumes the entire quantity by the end of monsoon. Just before the monsoon, every house hold is deployed exclusively on gathering of fire wood and if the same is not available sufficiently in and around their homes, they sneak in to near by forest and carry by head loads. Dry fuel wood is one of the biggest demand just before monsoon. In any case, people from outside the sanctuary normally do not venture for more than 1 to 2 kms deep in to the forest.



**PART – II**  
**PROPOSED MANAGEMENT**

**CHAPTER – 5**  
**PLAN OBJECTIVES AND PROBLEMS**

**5.1: Objectives of Management:** Sharavathi valley wildlife sanctuary is a unique and intact piece of forest harboring diverse rich flora and fauna with distinct ecological features. The prime objectives for the management of the sanctuary are as follows.

- To protect the sanctuary to the fullest extent possible so that many endangered and endemic flora and fauna inhabiting the area are adequately protected and propagated.
- Arrest and reverse the trend of forest degradation due to the unsustainable removal of forest products by communities living in and around the forest areas. Restore the degraded portions of the division to its original glory, through habitat improvements and watershed managements.
- Reverse the trend of forest degradation due to monoculture exotic species plantation by gradually thinning the exotic species and introducing the local species and fruit yielding species.
- Develop water resources through plantations and water harvesting programme. Treatment of micro watershed in the project are by soil conservation, ground water recharge to rejuvenate the degraded habitats and improve the site quality. Improving the ground water recharge by desilting the existing water holes, construction of check dams etc. to create awareness among the people about the need to protect the nature in general and sanctuary in particular.
- To maintain and develop, to extent considered necessary tourism for recreation, education and scientific exploration. To provide wilderness experience to genuine

enthusiasts in particular and to the interested public in general. To enable the public to see and appreciate the rich heritage of our country.

- Involve the people living inside the sanctuary in protection, wildlife conservation, identify and promote eco-friendly practices and life style pattern by way of meeting ecological awareness among people.
- Create durable community assets for such populations, which would contribute to overall eco-development in the target areas. To reduce the negative impacts of people of the protected area and resolve man-animal conflict and vice-versa through eco-development activities and conservation education.
- To provide for capacity building for efficient management of the sanctuary through better training of staff, infrastructure and close monitoring.
- To promote and encourage wildlife research and ecological studies consistent with the long term management objectives.

## **5.2: Problems in achieving objectives:**

- a) Presence of large number of settlements in the sanctuary.
- b) Fire and grazing pressure.
- c) Exotic plantations.

**CHAPTER – 6**  
**THE STRATEGIES**

**6.1: Boundaries:** The boundaries have been already dealt in chapter-II, elaborately.

**6.2.: Zonation and zone plans:**

The sanctuary has been divided in to three zones based on the utility.

1. Core Area or Core Zone.
2. Buffer Area or Buffer Zone.
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**Zones and their extent:**

| Zone         | Forest                             | Compt           | Extent in Ha.   |
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**6.3: Theme plans:** Through a series of measures, most of the objectives set out in the previous plan are achieved. Sanctuary is now totally free from timber extractions operations. Protection level is enhanced. Poaching has come down drastically. The forests have been regenerating very satisfactory. So faunal density is also growing appreciably. Constitution of the sanctuary and the restrictions thereon are also adequately publicized. The sanctuary is now at a crucial stage of take off. For achieving the plan objectives, the following strategies are necessary.

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4. Tourism.
5. Mitigate the external pressure.

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The objectives of the eco development are as follows.

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2. To improve the eco system and their bio diversities in the impacted zone.
3. To create alternate sources for the natural resources.
4. To improve the socio economic conditions of the people depending upon the sanctuary resources for sustenance and also to provide employment and income generating jobs to needy people.

## CHAPTER – 7

### TOURISM, INTERPRETATION AND CONSERVATION EDUCATION

**7.1: General:** It is recognized that unless people from different walks of life see and experience for themselves the serenity and beauty of the natural environment, the sheer richness, complexity and delicate balance that exist within the biological world and grand nature of many rare and endangered species. They are unlikely to appreciate the true value of biodiversity conservation and in turn the required public support may be found wanting.

**7.2: Objectives:** Eco-tourism is markedly different from other kinds of tourism and requires a sensitive cautious approach including meticulous planning. So lot of planning is necessary to enhance the physical carrying capacity and also ensure that visitors experience the wilderness.

1. To spread the message regarding the need to reserve all forms of fauna and flora and enable the public to see and appreciate the rich heritage of our country.
2. To educate the people especially those living near by the sanctuary areas regarding the need to maintain such sanctuary and there by enlisting their cooperation.
3. To inculcate in the minds of children love for all forms of wildlife and need for conservation of natural resources.
4. To provide wilderness experience to game enthusiasts in particular and to the public in general.
5. To provide for recreation and adventure sporting.

Tourist visits should maximize people enjoyment and increase visitors concern for nature conservation. Without a well laid policy and guided programme, visits tend to be ritualistic. Tourist facility should be so late as to be accessible by public transport. A range of choices are necessary to suit different visitors. But providing rest and tranquility is common to all.

At present there are two forest bungalows at Jog and Nagavalli and a Nature camp at Muppani respectively. There are three watch towers inside the sanctuary.

**7.3: Problems:** As explained in the previous chapters there are many settlements inside the sanctuary. Rehabilitation of these peoples have been discussed.

**7.4: The strategies:**

**7.4.1: Identification of the zone:** There are three distinct zones identified for tourism, core and buffer zone. Eco-tourism may be conducted in tourism zone.

**7.4.2: Infrastructure:**

**Nature Education camp:** Nature camps are mainly meant for young groups, school children etc. At present there is one nature camp at Muppani. Functional facilities like make shift accommodation, cooking, drinking water, toilets, interpretation centre, large open space, a small library, audio visuals etc., are necessary to entertain the groups for 2-3 days. Low cost books, stickers, posters etc., on environment, wildlife and forest may be supplied to the participant. A detailed permanent map of the sanctuary, resource persons for regular talks and local guides are necessary for each camp. The activities for visitors may include trekking, wildlife viewing from watch towers, collection of antlers feathers, identification of plants bird watching, painting etc.

**Game paths:** Game paths will be open to tourist as per their requirements. The target groups are students, youths and teachers. Private vehicles may be franchised to take tourist on these routes on fixed charges. A trained guide / department staff should accompany such hired vehicles.

**Trekking paths:** There is also a need for developing certain trekking paths from the fringe to the nearest hill peak are to a specific landscape elements. These trekking paths should be well laid out, provided with good signages and manned by trained local youth who will act as guide. Separate skill development training should be held for the local youth for this purpose. Further considering the requirements of various trekking groups, routes may chalked out in future. There are two trekking paths in Sharavathi wildlife range, situated at Adigudda and Govardhanagiri forest.



**Eco-Tourism guide lines:**

1. Activities permitted are trekking, bird watching, photography, swimming in the notified places, and wildlife viewing without disturbing them.
2. Group activities should be encouraged
3. Guide should be selected, trained and made available to the visitors all cost.
4. The tourist should be given a thorough briefing of do's and don't's and it should be included in the guide book.

**7.4.3: Regulations, monitoring and evaluation:** Impact of the tourism should be monitored closely by observing the sighting chances of wild animals, visible impacts of litter, wear out of the trekking paths, degradation of the vegetation, frequent encounter of such other by tourist etc., to determine the carrying capacity and accordingly the tourist number should be controlled.

**CENSUS:** During January 2006 census of predators and ungulates has been carried out through out the division. Census wild fauna is a difficult task given the habitat conditions, low density and availability of water round the year. Mega fauna such as Gaur, Sambars and Deer etc., which live in herds can be easily located and recognized by the local forest protection camps. They should keep a watch on the population size of these herds and trends. The data reported by them should be screened to arrive at an estimate of their population. Alternatively transect estimate can also be taken up. Other important species such as Bears, King cobra, Horn bill etc., are very difficult to sight and therefore population estimates can only be on the basis of random sampling.

**Research and monitoring:** There is no separate research section in the wildlife wing. Academic and research institutions conduct most of the research work with their own funding. Usually the research work is isolated and unconcerned with the management issues of the PA. Findings of the research work are not made available. Considering the high bio diversity and a conglomeration of agencies working on different subjects, there is a need to monitor research work very closely at the PA level itself.

**7.4.4: Publicity:** Publicity is the basic ingredient for building any opinion or brand image. The need to develop and opinion for the sanctuary is very essential for its survival in long term. It will also aid in removal of any misgivings if any about the sanctuary. The following activities are enlisted.

- Nature education camps for students and teachers of schools and collages.
- Workshops for local community leaders like members of Gram panchayat, Taluka panchayat and Zillah panchayat, and other elected representatives.
- Publishing of posters, hand bills, pamphlets and brochures etc.

## CHAPTER – 8

### ECO-DEVELOPMENT

**8.1.: Objectives:** The programme is aimed at mitigating the problems of the people living around the sanctuary, who exert pressures on the sanctuary resources for their bona fide utilities, such as firewood, small timber, fodder and grazing lands and also suffer from the crop damages and cattle kill by wild animals. The objectives of the programme are to create alternative resources to the people living in and around the area.

There can not be any development and protection of the sanctuary without the active co-operation and support of the local population. Many people do not have basic facilities like safe potable water, health services, education, electricity etc. The programme is aimed at mitigating the problems of the people living around the sanctuary, who exert pressures on the sanctuary resources for their bonafide uses such as fire wood, small timber, fodder and grazing land and also suffer from the crop damage and cattle kill by the wild animals. The objectives of the programme are to create alternative resources to the people in and around the area. To relive their dependency, and to reduce pressure on the sanctuary and also to improve their socio economic condition, the peoples are required to be employed in the development works, so that they will cooperative with the wildlife authorities in management of wildlife and the ecosystem.

#### **8.2: Specific issues:**

The specific issues of the objectives are as follows for the eco-development.

1. To reduce the pressure of the people on the protected areas like fuel wood, small timber and NTFP by making themselves sustained in their basic needs.
2. To improve the eco system and their bio diversities in the impacted zone.
3. To create alternate sources for the natural resources.
4. To improve the socio economic conditions of the people depending upon the sanctuary resources for sustenance and also to provide employment and income generating jobs to needy people.

**8.3: Broad strategies:** The broad strategies are as under

- a) Subsidy for replacement of country cattle by improved varieties.
- b) Immunization of cattle against communicable diseases like rinderpest, foot and mouth diseases.
- c) Encouraging stall feeding and rearing high yielding cattle breeds by artificial insemination.
- d) Providing smokeless chulha to each family at Government cost.
- e) Encouraging gober gas plants by giving 50% subsidy.
- f) Supply of fuel wood and timber yielding seedlings to farmers to grow in their fields.
- g) Providing solar lights and solar cooker at Government cost.
- h) Raising fuel wood plantation in Panchayat village community lands.
- i) Providing solar heaters to backward village hostels.
- j) Supply of grafted variety of fruit yielding seedling and coconut seedlings to farmers to improve their economic conditions.
- k) Providing bee-hive boxes and training the people in bee keeping at Government cost.
- l) Encouraging modern agriculture by providing improved quality of agricultural seeds and exposing them for advanced and modern agricultural practices.
- m) Raising fodder farms and agro forestry.
- n) Supply of bamboos and poles to artisans and economically backward families.
- o) Arranging training to the villagers in basket making, agarbathi sticks and other cottage industries and to promote the marketing activities.
- p) Providing employment opportunities on temporary / permanent basis to the local people in C and D class jobs.

**8.4: Protection of Habitat:** The sanctuary enjoyed a fair degree of protection on account of its settlements. Staff provided originally for the management of the sanctuary is inadequate and some posts need to be shifted. A large number of posts remain unfilled. The principals under lining the protection is

- a) Providing protection to the natural flora and fauna against predation by human beings (smuggling, poaching, and encroachment).

- b) Management of fire.
- c) Protection of wildlife from live stock (communicable disease)
- d) Maintenance of boundary demarcation.
- e) Providing good communication to achieve all of above.
- f) Fencing to exclude domestic live stock from the area for the benefit of the wildlife.
- g) Creation and maintenance of fire breaks and fire lines.
- h) Conversion of monoculture exotic species plantation in to diversified wood lands.

**SIGNIFICANCE OF WILDLIFE HABITAT:** Wildlife and wildlife habitat play a vital role in the ecological and biological processes that is essential to life itself. The functioning of the biosphere, and hence the maintenance and enhancement of human life, depends on countless inter actions among plants, animals and micro organisms.

These ecological processes are essential for agriculture, forestry, fisheries and other endeavors necessary to human life. They also help maintain environmental quality by degrading and otherwise removing some pollutants and by preventing waste accumulation. Some of the biological processes in which wild species play a key role are pollination, germination seed dispersal, soil generation, nutrient cycling, predation, habitat maintenance, waste break down and pest control.

Wildlife habitat regardless of whether it is upland or wetland habitat, is significant because of a number of functions it performs to support wildlife. Wildlife needs adequate space and habitat for the following basic life requirements:

1. Safe, undisturbed area for breeding, both on land and in the water.
2. Shelter, which can be underground, in the soil, on the land surface, in water, or in trees and shrubs.
3. Food supply, which may require suitable habitat for the plants and animals that provide the food supply.
4. Migratory routes and
5. Over wintering areas for those species that require seasonal migration for shelter or breeding.

**ESTABLISHING FOREST PROTECTION CAMP AND INTENSIVE PATROLLING:** In view of better protection and control the original section and beats have been reconstituted and proposals have been sent. Good protection is possible by intensive foot patrolling in groups or teams. Protection will be easy if the field staff stay close to the forest. The forest protection camp should support every section forest officer. Each camp should consist of a group of three people and should be housed with in the sanctuary in appropriately built camp sheds. Permanent staff should join the camp team on shift duties and patrol the beats and section very intensively and regularly. Permanent staff should lead the protection camp staff. Ideal patrol team size should be four people equipped with a weapon and wireless set. Establishing sufficient number of these camps and ensuring that all parts of the sanctuary are patrolled regularly is the most important aspect of protection.

List of places suggested for construction of semi permanent sheds is as under.

| Sl. No. | Range                      | Locations                                  |
|---------|----------------------------|--|
| I       | Kargal Wildlife Range.     | Aralagodu<br>Ambaragodlu<br>Bidaruru       |
| II      | Sharavathi Wildlife Range. | Kattinakaru<br>Biligaru<br>Kanuru<br>Koagu |

The forest protection camp should be so designed to command a good view of the forest and should be accessible to the wireless network. Every camp should be provided with maps, minimum facilities for cooking, a weapon, a walkie, first aid kit and solar power. Free ration also have to be provided. Protection camps should attend to the problems relating to poaching, smuggling of timber, cattle grazing, fire, trekkers, litter, and petty maintenance works etc. Each camp should maintain a daily movement cum observation registers where in all kinds of information pertaining to the flora, fauna and offences should be registered. The proforma for recording daily information.

**FIRE MANAGEMENT:** Fire plays a very critical role in the habitat management. One of the main factors that have accelerated the degradation of forest cover is the occurrence of the fire which has almost become an annual feature. The grazers, fire wood and NTFP collectors and tourist tend to set fire deliberately or by accident. Smugglers and poachers also set fire to the forest to divert the attention of field staff. Due to the forest fire the natural regeneration is lost and the forest is deprived of rich humus. Wild animals particularly herbivores are the worst sufferers for want of green foliage. Wild innumerable soil fauna will be destroyed, which play a very important role in maintaining the ecological balance by decomposing and releasing energy from plant and animals. Hence preventive and fire control measures have been given much importance in the habitat development. Considering all these factors the following measures are suggested.

1. Fire line clearance & maintenance.
2. Employing fire watchers during summer.
3. Erection of watch towers.
4. Communication systems like Roads, Wireless sets, Walkie Talkie sets, Telephones etc.
5. Establishing anti poaching squad.
6. Establishing manned checking gates.
7. Supply of guns and ammunitions to the staff.
8. Protection from grazing.

**CREATION AND MAINTENANCE OF FIRE BREAKS:** Fire breaks should be created along the highway margins, game paths, and areas which are sensitive to fire. The fire breaks should be of 4 meters width. Fallen trees on these lines should be cleared and disposed off. The network of game paths and patrolling tracks act as permanent fire breaks and they should be so maintained by annually clearing the grasses and other weed growth in the month of December. Normally these belts are fire traced. If the work of clearing of fire breaks is undertaken in late November or early December, it helps in generating a new flush of grass along the fire breaks. This work is found to be more effective than late clearance and fire tracing.

Fire zones are generally well known and therefore the required fire breaks have been identified and prescribed for annual clearing in the programme of work. The new fire breaks may be identified and created in the vulnerable forest area.

**FIRE DETECTION AND CONTROLL:** As the forest areas of the sanctuary are plain to sloppy areas, the detection of fire is easy from a hill top. The places ideal for the purpose are:

1. Kargal Wildlife Range, Kargal : Muppani, Attigodu.
2. Sharvathi Wildlife Range, Kogar : Govardhanagiri, Kanurukote.

Permanent watch towers should be constructed at these stations. Staff should be positioned on them. These teams should be dispatched in the provided jeep to the scene of fire immediately on message to put out the fire. Road network should be developed in a manner to enable these teams to reach the fire spots as early as possible. The forest protection camp may also be appropriately redeployed to keep a check on the fires and avail their services. Wild fire spreads rapidly and exponentially. The number of fires can not be reduced substantially in the near future but the extent of fire damage can be brought under control. Fire protection staff and arrangements should be in place by middle of December and can be wound up by the end of April. During exigencies more parties can be engaged and hired vehicles can be used.

**FIRE MONITORING AND REPORTING SYSTEM:** Incidents of fire should be reported to the head quarters on wireless immediately. The Range Forest Officer should submit daily report of fire occurrence in the following formats to the division office from January to end of April every year:

**DAILY FIRE REPORT**

Range:

Date:

| Sl. No. | Forest | Time of detection | Time of attendance | Summary of damage to forest |
|---------|--------|-------------------|--------------------|-----------------------------|
|         |        |                   |                    |                             |

**Signature of Range Forest Officer**



The Range Forest Officer should record the fire occurrences in the range map for future references.

**PROTECTION AGAINST GRAZING:** Grazing is directly related to the human habitations inside the sanctuary. So long the enclosures exist and people are allowed to continue in their traditional agricultural profession, rearing of cattle is necessary to support their lively hoods. A sustained campaign of bringing awareness among the inhabitants may slightly reduce the intensity of these activities but total control will only be possible when all the people are rehabilitated.

**PROTECTION AGAINST ENCROACHMENT:** The majority of the people who are living inside the sanctuary are living from a very long time. There is always an attempt to extend their land to the adjoining forest land. To avoid such attempts, the enclosures have to be demarcated and CPT work should be taken up. Awareness regarding the value of forest and causes of destruction of forest should be conveyed.

**PROTECTION FROM COMMUNICABLE DISEASES:** Although there was no recorded of epidemics to the wild animals, abundant precaution is necessary as any incident could wipe out the entire ungulate population. Immunization of cattle within the sanctuary as well as outside up to a radius of 3 Kms should be regularly done at Government cost. It is a permanent solution to the threat.

**POACHING:** Poaching of small game such as Indian hare, Barking deer is rather difficult to detect. Poaching of big game is not found. However vigil has to be maintained.

**COMMUNICATION FACILITIES - WIRELESS NETWORK:** For effective protection against theft, fire, grazing etc., good communication facilities are necessary. An efficient wireless network is already functional. Due to the addition to existing staff strength, sufficient number of walkie talkies given to the front line staff. All the wireless equipments including the repeater station should be tuned up and kept in good working condition round the year and especially during the fire season.

**DEVELOPMENT AND MAINTENANCE OF PATROLLING TRACK NETWORK:** A good road network is necessary to provide access to the remote areas. The existing road network has been developed keeping this aspect in mind. However there are still certain short comings and all problematic areas are not accessible. Therefore new patrolling tracks should be planned, aligned carefully and developed at the earliest. Wherever necessary bridges and culverts should be built. The roads so formed should be inter connected.

**BOUNDARY AND “D” LINE MAINTENANCE:** External boundaries have to be maintained clearly and regularly. Demarcation pillars engraved with sanctuary title should be planted all along the boundaries. Maintenance of internal boundaries especially around the enclosures is also necessary so long the rehabilitation programme is not completed.

**PUBLIC EDUCATION:** People who are living inside the sanctuary are to be educated about the long term consequences of fire especially in terms of loss of soft palatable grasses and poor water retention. So a sustained campaign of public education through hand bills, films, posters, display boards etc., should be taken up. Serious efforts are also necessary to try and convince them to reduce the cattle numbers. Effective steps should be taken to prevent cattle grazing inside the sanctuary. It should form a part of the duties of the forest protection camps to dry away the cattle if and when found in the sanctuary.

**SUMMARY:** Protection is an important aspect until the rehabilitation of all inhabitants is completed and must be taken up with all seriousness. Sighting of animals is a direct indication of the degree of protection given. The present level of animal density is too low and unless ungulates are well protected, the possibility of carnivores going up in number is remote. As such the carnivore density is low and if ecological balance is to be restored, protection should be treated as a fundamental strategy in the over all management of the sanctuary.

**8.5: HABITAT MANAGEMENT:** This practice is applied to land with existing tree cover or land capable of growing trees or other woody vegetation to provide multiple resource benefits. The purpose of this is to establish or improve habitat for native species of wildlife and plants.

The sanctuary as a habitat is in good prospect but it is under tremendous pressures from different sources. The fundamental principals under lining habitat management are,

1. Return to land to the natural flora and fauna (removal of exotics)
2. Reduce human interferences.
3. Establishment of native trees are shrubs, seed producing perennial grasses, legumes and other specified small gains.
4. Seeding and propagation of threatened and endangered plants.
5. Vegetation management to control undesirable species and improve habitat quality.
6. Creation of wildlife corridors.
7. Water resource development.
8. Minor water control structure.

**RETRUN OF LANDS TO NATURAL FLORA AND FAUNA:** Extensive plantations of exotic species blot in the sanctuary. By suppressing the grasses they have displaced the local flora and consequently the fauna. There by the cattle are forced to migrate further interior and accordingly there is a shift in the feeding and breeding ground of the wild fauna. To support the cattle, people also go deeper in the forest and kindle fires. Exotics have no ecological role. Therefore all the exotic plants are to be removed.

**TEAK AND OTHER PLANTATIONS:** There are few teak plantations existing inside the sanctuary. Thinning of teak poles has to be carried out. Dibbling of fruit yielding species may enrich these sites. Further the exotics should be removed and seed dibbling, planting of bamboos and other naturally aided plantations can be taken up.

**NATURAL VEGETATION MANAGEMENT:** The objective is to maintain pristine conditions with in the sanctuary to capture the full spectrum of biodiversity and also unleash the full watershed potential.

**SOIL AND WATER CONSERVATION:** Soil is a non-renewable resource. Any disturbance, of any magnitude is bound to affect the nutrient cycling. The nutrient gets washed down and

replenishments will be extremely difficult to regenerate. It is necessary to take up construction of gully checks not only to retain the soil but also to improve the water storage capacity. The gully checks should be constructed with the available rubble stone. Soil and water conservation measures are a part of routine habitat improvement programme.

**WATER RESOURCES DEVELOPMENT:** Water is a crucial factor in wildlife management. By creating or closing water sources use of habitats by animals can be regulated. Water management involves locating areas without surface water during the pinch period and providing water supply. This should be best done by conserving natural water sources. There are many ponds and small tanks in the sanctuary, which should be identified and renovated. Rising of bunds, well designed and strong spill ways, desilting of tanks, creation of new water holes etc., can be thought of. Natural springs and seepage points can be developed for better and more water storage. Marsh lands of any size and nature, should be preserved. Water resources should be used for drawing wild animals away from water near human settlements and towards tourists spot. A network of water holes should be developed such that animals need not have to travel more than 3-4 Kms for water. Around water holes salt licks, either of salt blocks or common salt, spread on raised loose soil bed should be provided.

During rainy season water is wasted as runoff causing serious soil erosion. Hence in order to conserve soil and water, check dams, gully checks have to be constructed all along gullies and nalas, at regular intervals. Rubble stone check dam will serve the purpose. All such conservation works must start from top and proceed down the slopes to be effective.

**PROVISION OF SALT LICKS:** It has been found that artificial salt licks are very well utilized. So we can continue to renew the existing salt licks annually and also provide for more if necessary. On an average, 3 or 4 salt licks can be provided with in the vicinity of each pond. Over all 100 to 200 salt licks per range fairly well distributed would be sufficient to meet the requirement of animals.

**SUMMARY:** Habitat development have been given greater thrust including removal of exotic plantation. However works would be necessary to achieve the objectives of improving the water shed efficiency. Scope is big but quantum jumps will not be possible because of the complex environmental and ecological issues involved. Therefore habitat restoration programme should proceed steadily over a long time frame.

**8.6: Monitoring and evaluation:** Impact of the eco-development should be monitor closely by observing the activities proposed under eco-development.

## **CHAPTER – 9**

### **RESEARCH, MONITORING AND TRAINING**

**9.1: Research and monitoring:** There is no separate research section in the wildlife wing. Academic and research institutions conduct most of the research work with their own funding. Usually the research work is isolated and unconcerned with the management issues of the PA. Findings of the research work are not made available. Considering the high bio diversity and a conglomeration of agencies working on different subjects, there is a need to monitor research work very closely at the PA level itself.

**9.2: Training:** Training the officers and the staff of the department is indispensable and necessary for the officers for orientation of the project. The form of training should be in the field as well as on the class room.

**9.2.1: On the job training:** On the job training may be given to the officers and staff of the department to know the various aspects of forestry, the application of laws and regulations, post mortem of wild animal carcasses and other wild life health care matters, wild life evidences, collection of biological material and their interpretation.

**9.2.2: Formal training courses:** The formal training to the staff of protected area is going to help in crucial. Instituting and adopting a continuous learning process. The following trainings will be taken up during the plan period.

1. Field research techniques.
2. Weapon handling and maintenance.
3. Modern fire fighting.
4. Conducting census.
5. Map reading.

**9.2.3: Establishing a learning centre:** Any training activity is not an end itself. Besides its specific inputs, the role of training is to launch support to maintain the process of learning with objectivity, ultimately leading to the enhancement of management capability.

**CHAPTER – 10**  
**ORGANIZATION AND ADMINISTRATION**

**10.1: Structure and responsibilities:** At present management and administrative control of Sharavathi wildlife sanctuary is done by Shimoga wildlife division, with head quarters at Shimoga. Parts of areas in Sharvathi wildlife range, Kogar and Kargal wildlife range are yet to handed over by the regular division, Sagar. The existing staff pattern is as follows.

**A. Staff pattern of Sharavath wildlife sanctuary:**

| Sl. No. | Staff                         | Sanctioned posts | Existing post | Vacant |
|---------|-------------------------------|------------------|---------------|--------|
| 1       | Deputy Conservator of Forests | 1                | 1             | -      |
| 2       | Asst. Conservator of Forest s | 1                | 1             | -      |
| 3       | Range Forest Officers         | 2                | 2             | -      |
|         | Foresters                     | 6                | 5             | 1      |
|         | Forest guards                 | 8                | 2             | 6      |
|         | Forest watchers (MR)          | 14               | 14            | -      |
|         | Drivers (MR)                  | 2                | 2             | -      |
|         | Peons                         | -                | -             | -      |
|         | Cooks                         | -                | -             | -      |

**B. Details of Sections, Beats:**

| Sl. No. | Name of the Range | Sections  | Beats      |
|---------|-------------------|-----------|------------|
| 1       | Kargal WLR        | Aralagodu | Aralagodu  |
|         |                   |           | Ambargodlu |
|         |                   |           | Kargal     |
| 2       | Sharavathi WLR    | Biligaru  | Biligaru   |
|         |                   |           | Kanuru     |

|  |  |                         |           |
|--|--|-------------------------|-----------|
|  |  |                         | Kogaru    |
|  |  | Kogar                   | Karini    |
|  |  | Nagavalli               | Meghane   |
|  |  |                         | Nagavalli |
|  |  | Nagavalli checking gate |           |

Reorganization of Sections and Beats have been prepared and submitted to the higher officers for sanction accordingly.

**10.2: Staff amenities:** The Range Forest Officers of the sanctuary are provided with office and residential accommodation. There is a need to construct a house for the stay of Asst. Conservator of Forests, Wildlife Sub-division, Kargal with office. The Range Forest Officer, Wildlife Range, Kargal requires jeep. Majority of the subordinates are also provided official accommodation. In view of the reorganization and posting of more number of staff, some more quarters are required. Antipoaching camps are usually run in temporary / semi permanent sheds. The patrolling tracks have been provided with gates in sensitive areas. No patrolling track is allowed to be kept in open condition. There are three number of permanent watch tower erected in different parts of the sanctuary.

A basic network of tracks have been developed utilizing and inter connecting the existing village roads. All these village roads are meant to be patrolling track cum permanent fire breaks. List of patrolling tracks with in the sanctuary furnished here under.

**List of patrolling tracks:**

| Sl. No. | Range                 | Total length (in Kms.) |
|---------|-----------------------|------------------------|
| I       | Kargal WLR            | 25.00                  |
| II      | Sharavathi WLR, Kogar | 25.00                  |



This network however does not provide access to all parts of the sanctuary. There is a need to form fresh patrolling track to access each and every corner of the sanctuary.

**WIRELESS NETWORK AND TELEPHONES:** The sanctuary is provided with a good wireless network. There are static wireless sets at range head quarters and Asst. Conservator of Forests office, Karagal and two mobile sets in the vehicles. And there are No of walkie talkies distributed among officers, foresters and forest guards. There is one repeaters station established at Kogar of Sharavathi wildlife range. Recently the frequency upgraded to high band and all the static, mobile and walkie talkies are replaced with new ones. The repeater station is powered by solar panels. The system works very efficiently and message emanating from any source is circulated over the entire network. The system has proved very helpful especially in fire season and in protection.

The divisional office and all the range forest offices are connected by telephones.

**FOREST PROTECTION CAMP:** There are six forest protection camps which are working as permanent / temporary establishment, at different locations inside the sanctuary. Local youths are employed in these camps along with the permanent staff. But working of these camps is not yet systematized. They are used as support structures to makeup the staff shortages. In addition to the three forest protection camp recently three more antipoaching camps were established in sensitive zones of the sanctuary. They are help full in protection, fire control, anti poaching etc.

## CHAPTER – 11

### THE BUDGET

**11.1: The plan budget:** The budgetary provisions made available for the development of the sanctuary so far is very meager with most of the funds being spend mainly on the maintenance of works already executed. More funds may be provided as per the financial chart for the better management of the sanctuary. The details of budgetary requirements are discussed in the future formats.

**11.2. Programme of works:** A detailed programme of work indicating the year, location, quantity of work and their financial implications is furnished. The programme broadly divided in to six categories as under.

- Regular maintenance works.
- Protection works.
- Habitat protection and management.
- Eco development.
- Eco tourism.
- Infrastructure.

This classification aims at prioritizing different items of work in the order of their importance to the management of the sanctuary. Whenever there is budget constraint, the annual maintenance works should be accorded priority. Programmes like eco development of the buffer areas and rehabilitation of inhabitants require huge commitment of funds and therefore may not be possible under the routine annual programmes. They should be packaged separately as independent projects and sourced appropriately.

**ANNEXURE – I**  
**THE LIST OF APPENDICES**

| <b>Sl. No.</b> | <b>Title</b>  |
|----------------|---|
| 1.             | Notification of the sanctuary (Facsimile)                               |
| 2.             | Constitution extent of the protected area.                              |
| 3.             | The existing pattern of staff by hierarchical levels and scales of pay. |
| 4.             | List of mammals found in the division                                   |
| 5.             | List of birds found in the division                                     |
| 6.             | List of reptiles found in the division                                  |
| 7.             | List amphibians found in the division                                   |
| 8.             | List of fishes found in the division                                    |
| 9.             | List of species found in the division                                   |
| 10.            | List of vehicles sanctuary.   |
| 11.            | List of existing buildings  |
| 12.            | List of plantations.  |
| 13.            | List of villages included in the sanctuary                              |

**ANNEXURE - I**

**GOVERNMENT OF KARNATAKA**

No. AFD 22 FWL 74

Karnataka Government Secretariat,  
Vidhana Soudha,  
Bangalore, Dated 27.06.74

**NOTIFICATION**

Where by Government Notification No. AFD 70 FWL 71 dated 20<sup>th</sup> April 1972 the area, the situation and limits of which are specified in the schedule – I Below has been declared to be a sanctuary called as “**SHARAVATHI VALLEY WILD LIFE SANCTUARY**”.

And whereas the Government considers it necessary to alter the limits and boundaries of the said sanctuary.

And whereas the Government of Karnataka considers that it is desirable to declare the area, the situation and limits of which are specified in the Schedule –II below, to be a sanctuary as it is of adequate ecological faunal, floral, geomorphological, natural and zoological significance for the purpose of protecting, propagating or developing wildlife or its environment.

Now, therefore in exercise of the powers conferred by section 18 of the Wildlife (protection) Act., 1972 (Central Act 53 of 1972) the Government of Karnataka hereby declares the area, the situation and limits of which are specified in the Schedule – II below, to be a sanctuary called “**SHARAVATHI VALLEY WILDLIFE SANCTUARY**” (A & B BLOCKS).

**BOUNDARY DESCRIPTION:**

**NORTH** : **From** Linganamakki Dam, the road to the West leading from Linganamakki to Bhatkal – Kargal road. Then along this Bhatkal – Kargal road up to Talakalale approach road. Then along Talakalale approach road up to Junction of Bidarur – Attigod. Then along Bidarur – Attigod road with Talakalale approach road. Then along Bidarur – Attigod road up to Reservoir up to Kurkunji. Then along Nalla up to ‘Demarcation lines’ of Attigod and Jog State Forests.

All this is to the West of Linganamakki Dam. The Northern boundary to the east of Linganamakki Dam runs along the Reservoir Bank (maximum storage level)

**EAST :** Along the Reservoir bank up to Chikamatur. Then out across Chikkamatur land area and across back waters up to Ambaragodlu and then across the land near Ambaragodlu reaching back waters to the south West of Ambaragodlu. Then follow the eastern fringe of the land mass reaching old "Holebagilu" and then out across back water and reach Heggare.

**SOUTH** From Heggare, proceed all along the back waters towards west up to Kalasavalli (Launch site). then along Kalasavalli Tumri road up to algere cross. Then along Tumri – Halki road via Adakoli, Halaianakeri, Bankuli up to Hulki back waters near Guddemane. Then out o across back waters towards north – west and reach Yerur on the Bhatkal Kargal road and then along at mile NO. 16/1.

**WEST:** From Dittakoppa (Konjavalli) along the Konjavalli Heggare road up to Heggare. Then along the 'Demarcation line' between Jog and Attigod State Forests up to nala flowing from Kulkunji village and meeting Northern boundary.

### **SCHEDULE – II**

**NAME OF THE DISTRICT :** Shimoga District.

**AREA :** 1,06,240.00 Acres or 401.23 Sq. Kms.

**BOUNDARY DESCRIPTION :** **BLOCK 'A' 251.31 Sq. Kms.**

**NORTH:** From Linganamakki Dam, the road to The West leading from Linganamakki to Bhatkal Kargal road. Then along this Bhatkal Kargal road up to Talakalale approach road. Then along the back waters to Talalakalale Reservoir up to Kurkunji. Then along Nalla up to Demarcation line of Attigod and Jog State and then along Nalla to the west up to Eastern portion of Demarcation line of Govardhanagiri State Forest near Dabbe Falls, then the line runs along the demarcation line of Govardhanagiri State Forest up to the point where it taken a turn to the South.

**EAST:** Along the Linganamakki Reservoir Back water upto Chikkamttur. Then out across Chikkamattur land area and

across backwaters upto Ambaragodlu and then across the land near Ambaragodlu, reaching backwaters to the south west of Ambaragodlu. Then follow the eastern bridge of the land mass reaching old Hollebagilu and then out across back waters and reach Heggare.

**SOUTH:** From Heggare proceed along the back Waters towards west upto Kalagavalli (launch site) then along Kalgavalli Tumri Hulki road via Adkoli Halsinakeri, Bankuli up to Hulki-back waters near Guddemane. Then out across back water towards North, West and reach yerrur on the Bhatkal Kargal road and then along Kargal-Bhatkal road upto the point where the 'D' lines goes Govardhanagiri State Forest across the road after Kogar. Then along the 'D' line of Govardhanagiri State Forest up to the point where it meets the Western 'D' line of Govardhanagiri State Forest i.e., District Boundary (Shimoga).

**WEST:** From the point where Western portion of the 'D' line and north western portion of 'D' line of Govardhanagiri State Forest meets. It runs all along the Western 'D' line of Govardhanagiri State Forest upto the point where it takes a turn to the eastern portion of 'D' line running East West.

**Block – B 51.22 Sq. Km.**

**EAST:** Then the line runs south west along the Northern boundary of survey No.367 of Channagonda Village to its north west corner, then the line runs from the tri-junction bandhu of survey No. 273 and 274 of Kattinkar and 367 of Chennagonda village in south easterly direction along the western boundary of survey No.274 of Kattinkar to point 10 chains north east from the north west corner of survey No.312 of the same village then the line runs straight in south westerly direction through survey No. 273 and 270 of Kattinkar village to a distance of 50 chains up to point in Northern boundary of survey No.324 of the same village 50 chains south west from the north west corner of survey No.312 of the said village. Then the line runs straight in south easterly direction through survey No. 324 of the same village to a distance of 92 chains to a point in the common boundary of survey

No.324 and 135 of the same village a distance of 51 chain south west from the southern most corner of survey No.34 of the side village then a line runs due East along the common boundary of survey No.424 and 35 of the side village a distance of 11 chain and reach to a point 10 chains south

west corner of survey No.11 of the village. Then the line runs south east in a straight line a distance of 150 chains through survey No.35 and 97 of the same village 30 chains North west corner of survey No.103 of the same village. Then the line runs south east through survey No.97 and 235 of the said village a distance of 88 chains and reach a point in common boundary of survey No.235 and 206 of the same village, 35chains south west from the tri-junction bandu of survey No.164,165, and 206 of the said village and then line due west through survey Nos. 235 and 235, 243 of the same village a distance of 122 chains to a point 7 chains north west from the northern west corner of survey No.249 of the said village then the line runs south a distance of 52 chains and reach a point in the common boundary of survey No.249 and 251 of the same village. 6 chain south east from the south west corner of survey No.249 of the same village and then the line runs south east 8 chain along the common boundary of survey No.242, 251 and then in the same direction 40 chains along the common boundary of survey No.242, 251 and then in the same direction 40 chain along the common boundary of survey No.206 and 251 reach the tri-junction bandhu of survey No.206 and 261 of the Kattinkar and 126 of the Karni village for 52 chains reaches the left bank of Dodlinakki hall and then from Dodlinakki halla of Kattinavr village boundary the line runs south wards through survey No.79 and 122 of Karani village, along the left bank of the side halla till it reaches a point 5 chains north west from the south west corner of survey No.118 of the same village and then the line runs south east along the common boundary of survey No.119 and 120 and of the said village and then the line runs south east through survey No.1 of Karni village a distance of 30 chains to a point 8 chains south west from the south corner of survey No.2 of the said village. Then the lines runs north east through survey No.1 a distance of 58 chain till it reaches a point in the common boundary o survey No.53 and 1 of Karni survey No.33 of Karni village then along the Southern boundary of the 1<sup>st</sup> named survey No.153 to the tri-junction bandhu of survey No. 153 of Karni and 122 and 82 of Kodanavalli village then south along the western boundary of survey Nos 82 of Kodanavalli village to this south east corner.

**SOUTH** : Frontier boundary of south canara.

**WEST** : Frontier boundary of south canara and norht canara.

Water spread area : 123.63 Sq. Km.

Islands : 5.07 Sq. Km.

**BY ORDER IN THE NAME OF THE  
GOVERNOR OF KARNATAKA.**

**Sd/-**

**[S.SHYAM SUNDAR]**

**Special Officer & Ex-Officer,  
Deputy Secretary to Government.  
Agriculture and Forest Department.**

Copy of letter No. AFD 22 FWL 74 Dated: 28<sup>th</sup> June 1978 from the under Secretary to Government, Food & Forest Department, Karnataka Government Secretariat Vidhana Soudha, Bangalore to the Chief Conservator of Forest (GL) in Karnataka, Bangalore and copy to this office.

**Sub:** Sharavathi Valley Wildlife Sanctuary (A & B) Blocks Extension or issue of Notification under section 18 Wildlife (Protection) Act. 1972 investigation and determination of claims of action reports called for.

**Ref: 1.** Government Notification No. AFD 12 FWL 74 Dated: 27.06.1974.

Correspondence with letter No. M6-FOR-CR-11/74-75  
Dated: 15<sup>th</sup> June 1976 from the Deputy Commissioner,  
Shimoga.

**--0000--**

With reference to the correspondence ending with your letter No.B4-WLR-CR-69/73-74, on the above. I am directed to state that in circumstances reported by the Deputy Commissioner, Shimoga in this letter dated 15<sup>th</sup> June 1976 cited (ii) above (copy enclosed), the constitution of the Sharavathi Valley Wildlife Sanctuary (A & B) Blocks Extent on as notified under section 18 of the Wildlife (Protection) Act 1972 as per Government Notification dated 27<sup>th</sup> June 1974 cited also Sl. No. (i) above now stands confirmed.

**Yours faithfully,**

**Sd/-**

**[ H.Muniram ]**

**Under Secretary to Government  
Food & Forest Department.**

No. CWL-CR-16/78-79

Office of the  
Conservator of Forests, Wildlife.  
Preservation, old Soap Factory building,  
K.R.Circle, Bangalore: Dated: 31.0.7 78.

Copy to Assistant Conservator of Forest, Wildlife Preservation Sub-Division,  
Shimoga for information and necessary action.

**Sd/-**

**Conservator of Forests,  
Wildlife Preservation.**



**1. CONSTITUTION EXTENT OF THE PROTECTED AREA:**

| <b>Sl. No.</b> | <b>Name of the SF</b>    | <b>Extent in Sq. Km.</b> |
|----------------|--------------------------|--------------------------|
| 1              | Govardhanagiri S.F.      | 134.770                  |
| 2              | Karani S.F.              | 45.430                   |
| 3              | Muppane S.F. – Block – A | 9.579                    |
| 4              | Muppane S.F.- Block – B  | 6.249                    |
| 5              | Channagonda S.F. (part)  | 12.641                   |
| 6              | Attigodu S.F. (part)     | 7.650                    |
| 7              | Total submerision Area   | 123.630                  |
| 8              | Islands                  | 5.070                    |
| 9              | Others                   | 86.211                   |
|                |                          | <b>431.230</b>           |

**2. THE EXISTING PATTERN OF STAFF BY HIERARCHICAL LEVELS AND SCALES OF PAY:**

| <b>Sl. No.</b> | <b>Staff</b>                  | <b>Sanctioned posts</b> | <b>Existing post</b> | <b>Vacant</b> | <b>Scale of pay</b> |
|----------------|-------------------------------|-------------------------|----------------------|---------------|---------------------|
| 1              | Deputy Conservator of Forests | 1                       | 1                    | -             | 9580-14200          |
| 2              | Asst. Conservator of Forest s | 1                       | 1                    | -             | 7400-13120          |
| 3              | Range Forest Officers         | 2                       | 2                    | -             | 5575-10620          |
|                | Foresters                     | 6                       | 5                    | 1             | 3300-6300           |
|                | Forest guards                 | 8                       | 2                    | 6             | 3000-5450           |
|                | Forest watchers (MR)          | 14                      | 14                   | -             | 83.75/day           |
|                | Drivers (MR)                  | 2                       | 2                    | -             | 92.55/day           |

### 3. LIST OF MAMMALS FOUND IN THE DIVISION:

| Sl. No. | Latin names                           | Kannada name                | Common names                              |
|---------|---------------------------------------|-----------------------------|---|
| 1       | <i>Macaca sinica</i> (Linn)           | Kapi                        | The Bonnet Monkey                         |
| 2       | <i>Pithecus entellus</i> (Blyth)      | Musia                       | Hanuman Monkey                            |
| 3       | <i>Loris lydekkerianus</i> (Car)      | Kadupapa                    | Mysore Slender Loris                      |
| 4       | <i>Felis affinis</i> (Linn)           | Huli, Dodhull,<br>Pattehuli | The Tiger                                 |
| 5       | <i>Felis affinis</i> (Grey)           | Kadubekku                   | The Jungle Cat                            |
| 6       | <i>Acinonyx venaticus</i>             | Kiruba                      | The hunting Leopard<br>or Cheetah         |
| 7       | Mangos Mango mungo<br>(Geml)          | Mungasi                     | The indian mongoose                       |
| 8       | <i>Canis indicus</i> (Hodgs)          | Nari                        | The Indian Jackal                         |
| 9       | <i>Lutra lutra</i> (Linn)             | Nirunayi                    | The common Otter                          |
| 10      | <i>Melurus ursinus</i> (Shaw)         | Karadi                      | The Sloth Bear                            |
| 11      | <i>Tragullus meminna</i> (Erxl)       | -                           | The Indian chevrothin,<br>Mouse Deer      |
| 12      | <i>Pteropus giganteus</i>             | -                           | The Indian flying Fox                     |
| 13      | <i>Lyroderma lyra lyra</i> (Geoff)    | -                           | The vampire Bat                           |
| 14      | <i>Petaurista philippensis</i> (Elli) | Harubekku                   | The South Indian flying<br>Squirrel       |
| 15      | <i>Seiurus Malabaricus</i> (Linn)     | Kendalilu                   | The red squirrel, the<br>Malabar squirrel |
| 16      | <i>Seiurus</i> (H.Sm.)                | Kati, Kadukona              | The Gaur, The Bison                       |
| 17      | <i>Muntiacus vaginalis</i> (boded)    | Caducei                     | The Barking deer                          |
| 18      | <i>Rosa Uni-colour</i> (Bees)         | Kara, Cadaver               | The sandbur                               |
| 19      | <i>Axis</i>                           | Sarong                      | The spotted Deer                          |
| 20      | <i>Sues cryostats</i> (Wang)          | Kaduhandi                   | The Indian Wild Boar                      |
| 21      | <i>Hystrix leucra</i> (Sykes)         | Mullandi                    | The Indian Porcupine                      |
| 22      | <i>Manis crassicaudata</i> (Geoff)    | Chipuhandi                  | The Indian Pangolin                       |

### 5. LIST OF BIRDS FOUND IN THE DIVISION:

| Sl. No. | Latin names                           | Kannada name        | Common names                        |
|---------|---------------------------------------|---------------------|-------------------------------------|
| 1       | <i>Corvus macrithyncus</i> (Eagl)     | Kage                | The Jungle Crow                     |
| 2       | <i>Palaeornis torquatus</i> (Bodd)    | Gill, Gini          | The Common Indian Parrot            |
| 3       | <i>Neopharon ginginianus</i> (Lath)   | Haddu               | The vulture                         |
| 4       | <i>Harasser indus</i> (Bodd)          | Garuda              | The Bromine kite                    |
| 5       | <i>Crocopus chlorogaster</i> (Bluth)  | Biliva              | The Green Pigeon                    |
| 6       | <i>Columba intemedia</i> (Strikill)   | Kadupariala         | The Blue rock pigeon                |
| 7       | <i>Pavo cristatus</i> (Linn)          | Navilu              | The Pen fowl                        |
| 8       | <i>Gallus sonnerati</i> (Temmm)       | Kadukoli            | The gray jungle fowl                |
| 9       | <i>Gallooerdix spadicea</i> (Gu)      | Chittagoli          | The red Sour fowl                   |
| 10      | <i>Francolinus pondicerians</i> (Gm)  | Gawjalakki          | The Gray partridge                  |
| 11      | <i>Sarcidiomis melanonotus</i> (Penn) | Nirukoli            | The Comb Duck                       |
| 12      | <i>Dendrocyena javanica</i> (Horsf)   |                     | The Whistling teal                  |
| 13      | <i>Nettium crecea</i> (Linn)          |                     | The Common Teal                     |
| 14      | <i>Gallus banakiva murgi</i>          | Kempu kadukoli      | The Red Jungle Fowl                 |
| 15      | <i>Dendrocittarufa</i>                | Matapakshi          | The Tree pie                        |
| 16      | <i>Dumetia hyperithra</i>             | Chirapakshi         | The Rufous-Hellied Babbler          |
| 17      | <i>Otocompusa jocose fascucaudata</i> | Kembumise bulbul    | The Southern Red Whiskered Bul Bul. |
| 18      | <i>Saxicolodes cambaiensis</i>        | Buda balatuti       | The Indian Robin                    |
| 19      | <i>Pienonotus luteolus</i>            | Bul bul             | The white browed Bul bul            |
| 20      | <i>Tehitrea paradise</i>              | Rajahakki           | The paradise flycather              |
| 21      | <i>Cyornis tickellioe</i>             | Nili-Rajahakki      | Tickelle Blue flycatcher.           |
| 22      | <i>Tephrodornis pondiceriana</i>      | Bharadwaja          | The common woodshrike               |
| 23      | <i>Pericocotus speciosus</i>          | Chtrapakshi         | The Scarlet minivet                 |
| 24      | <i>Dicururus macrocerus</i>           | Kare bharadwaja     | The king Crow                       |
| 25      | <i>Dissemurus sctorius</i>            | Bharadwaja          | The Rocket tailed drongo            |
| 26      | <i>Orthotomus sctoricus</i>           | Chipaganahakki      | The Tailor Bird                     |
| 27      | <i>Acredotheres trestis</i>           | Goravantehakki      | The Common myna                     |
| 28      | <i>Gymnoris xanthocolis</i>           | Kodagubachi         | The Yellow throated Sparrow         |
| 29      | <i>Hirindo rustica</i>                | Bannakki            | The Common Sallow                   |
| 30      | <i>Hirundo filifera</i>               | Tantihanakki        | Wire tailed Swallow                 |
| 31      | <i>Dicoem erythrorhyncum</i>          |                     | Tikells Flower peacker              |
| 32      | <i>Leopicus blanfordil</i>            | Marakatiga          | Yellow frinted pied wood peacker    |
| 33      | <i>Centropus parroti</i>              | Kempukage, Kembutha | The Southern crow pheasant          |
| 34      | <i>Alcedo benghalensis</i>            |                     | The Common kin fisher               |
| 35      | <i>Sarcogyps calvus</i>               | Ranahaddu           | The Black Vulture                   |

|    |                                   |           |                              |
|----|-----------------------------------|-----------|------------------------------|
| 36 | <i>Astur dussumier</i>            | Shikara   | The Indian shikhara          |
| 37 | <i>Oenopopelia transquebarica</i> | Galava    | The red turtule dove         |
| 38 | <i>Amauromis phoenicurus</i>      | Nirakoli  | The white breasted water hen |
| 39 | <i>Bulbulcus coromandus</i>       |           | The cattle egret             |
| 40 | <i>Nettion crecca</i>             |           | The common teal              |
| 41 | <i>Demdrocygna javanica</i>       | Nirubathu | The common whistling teal    |
| 42 | <i>Niroca rufa</i>                | Batu      | The white Bye                |

## **6. LIST OF REPTILES.**

| Sl. No. | Latin names                          | Kannada name                 | Common names           |
|---------|--------------------------------------|------------------------------|------------------------|
| 1       | <i>Crocodilus palustris</i> (Less)   | Mosale                       | The Mugger             |
| 2       | <i>Testudo elegans</i> (Schoep)      | Ame                          | The land Tortoise      |
| 3       | <i>Gonotodes mysorensi</i> (Gord)    | Uda                          | The Monitor lizard     |
| 4       | <i>Calotes versicolor</i> (Dand)     | Hentegooda                   |                        |
| 5       | <i>Chameleon calcaratus</i> (Merrem) | Hentegooda                   | The Chameleon          |
| 6       | <i>Python molures</i> (Linn)         | Hebbau                       | The Python             |
| 7       | <i>Tropidinotus stolatus</i> (Linn)  | Hasaru Havu                  | The Common Green Snake |
| 8       | <i>Bugarus coeruleus</i> (Schn)      | Kattihavu                    | The Krait              |
| 9       | <i>Naja tripudians</i> (Merr)        | Nagarahavu                   | The Cobra              |
| 10      | <i>Vipera resseli</i> (Shaw)         | Kalinga Sarpa,<br>Karinagara | Viper King cobra       |

## **7. LIST OF AMPHIBIANS:**

| Sl. No. | Latin names                             | Kannada name    | Common names        |
|---------|---|-----------------|---------------------|
| 1       | <i>Rana hexadactyla</i> (Less)          | Hasarukappe     | The Green tank frog |
| 2       | <i>Rantigrina</i> (Dand)                | Mamadakappe     | The Bull frog       |
| 3       | <i>Rana cyanophlyctis</i> (Schneid)     |                 | The Concer frog     |
| 4       | <i>Rana malabarica</i> (Dum)            | Malekappa       | The Tree frog       |
| 5       | <i>Rhacophorus pleuroxtictus</i> (Guth) | Maradakappa     | The Tree frog       |
| 6       | <i>Rana verrucosa kalloula</i> spp      | Balemaradakappe | The Plantain frog   |

## **8. LIST OF FISHES:**

| Sl. No. | Latin names                                | Kannada name      | Common names       |
|---------|--|-------------------|--------------------|
| 1       | <i>Clarias batrachus</i> (Linn)            | Anaminu           | The Black cat fish |
| 2       | <i>Saccobranchnus fossillis</i> (Block)    | Chelumiu          | Scorpin fish       |
| 3       | <i>Wallago attu</i> (Bloche)               | Baiwminu          |                    |
| 4       | <i>Callichrous bimaculatus</i> (Bloche)    |                   | Butter fish        |
| 5       | <i>Pseudotropius atheronoides</i> (Bloche) |                   | Lady fish          |
| 6       | <i>Macrones vittatus</i> (Block)           |                   | Pidler             |
| 7       | <i>Macrenes aor</i> (H.B.)                 |                   |                    |
| 8       | <i>Macrenes kelitius</i> (H.B.)            |                   |                    |
| 9       | <i>Barbus tor</i> (H.B)                    | Biliminu, Masheer |                    |
| 10      | <i>Barbus neilli</i> (Day)                 | Biliminu, Masheer |                    |
| 11      | <i>Barbus sarana</i> (H.B)                 | Gid pakke         |                    |
| 12      | <i>Labeo kontius</i> (Jerd)                | Handikurulu       |                    |
| 13      | <i>Labeo boga</i> (H.B)                    | Mada kurlu        |                    |
| 14      | <i>Mastocembalus armatus</i> (Lacep)       | Havuminu          |                    |
| 15      | <i>Ophioce halus puntatus</i> (H.B)        | Kacuminu          |                    |
| 16      | <i>Oleucopunctatus gachua</i> (H.B)        | Korave            |                    |

### **9. LIST OF SPECIES:**

| Sl. No. | Batanical name                    | Vernacular name     | Family        |
|---------|-----------------------------------|---------------------|---------------|
| 1       | <i>Acacia Arabica</i>             | Karijali            | Mimoseae      |
| 2       | <i>Acacia catechu</i>             | Kaggali, Khair      | Mimoseae      |
| 3       | <i>Acacia concianna</i>           | Seege               | Mimoseae      |
| 4       | <i>Acacia ferruginea</i>          | Banni               | Mimoseae      |
| 5       | <i>Acacia intia</i>               | Kaduseege           | Mimoseae      |
| 6       | <i>Acacia leucophloea</i>         | Bilijali            | Mimoseae      |
| 7       | <i>Acacia suma</i>                | Mugalimara          | Mimoseae      |
| 8       | <i>Adhatoda vasica</i>            | Adusoge             | Acanthaceae   |
| 9       | <i>Adina cardifolia</i>           | Yethyaga            | Rubiaceae     |
| 10      | <i>Aegle marmelos</i>             | Bilwapatre          | Rutaceae      |
| 11      | <i>Aglaia roxburghiana</i>        | Kempunola           | Meliaceae     |
| 12      | <i>Ailanthus malabarica</i>       | Halmaddi            | Simaroubaceae |
| 13      | <i>Albizzia amara</i>             | Sujjalu             | Mimoseae      |
| 14      | <i>Albizzia lebbek</i>            | Kallubage           | Mimoseae      |
| 15      | <i>Albizzia odoratissima</i>      | Bilwara             | Mimoseae      |
| 16      | <i>Albizzia procera</i>           | Bellatte            | Mimoseae      |
| 17      | <i>Alseodaphne semecarpifolia</i> | Mase, Nelthere      | Lauraceae     |
| 18      | <i>Alstonia scholaris</i>         | Maddale             | Apocynaceae   |
| 19      | <i>Amoora canarana</i>            | Hottenola           | Meliaceae     |
| 20      | <i>Anacardium occidentale</i>     | Geruhannu, godambi  | Anacardiaceae |
| 21      | <i>Anogeissus latifolia</i>       | Dindiga             | Combretaceae  |
| 22      | <i>Anthocephalus cadamba</i>      | Neerubale           | Rubiaceae     |
| 23      | <i>Antiaris toxicaria</i>         | Ajjanapatte         | Moraceae      |
| 24      | <i>Antidesma diandrum</i>         | Hulimajjige         | Euphorbiaceae |
| 25      | <i>Aporosa lindleyana</i>         | Sarali, Sali        | Euphorbiaceae |
| 26      | <i>Arenga wightii</i>             | Dadasal             | Palmae        |
| 27      | <i>Artocarpus hirsute</i>         | Hebbalasu           | Moraceae      |
| 28      | <i>Aetocarpus integrifolia</i>    | Halasu              | Moraceae      |
| 29      | <i>Artocarpus lakoocha</i>        | Vatehuli            | Moraceae      |
| 30      | <i>Azadirachta indica</i>         | Bevu                | Meliaceae     |
| 31      | <i>Bambusa bambos</i>             | Hebbiduru           | Graminae      |
| 32      | <i>Bassia latifolia</i>           | Ippe                | Sapotaceae    |
| 33      | <i>Bauhinia malabarica</i>        | Mandara             | Papilionaceae |
| 34      | <i>Bauhinia racemosa</i>          | Basavanapada        | Caesalpiniae  |
| 35      | <i>Bauhinia vahlii</i>            | Basavanapada-balli  | Papilionaceae |
| 36      | <i>Boswellia cerrata</i>          | Bilidhupa, Sambrani | Burseraceae   |
| 37      | <i>Brindelia retusa</i>           | Goje                | Euphorbiaceae |
| 38      | <i>Buchanania latifolia</i>       | Nurukalu            | Anacardiaceae |
| 39      | <i>Butea monosperma</i>           | Muttuga             | Papilionaceae |
| 40      | <i>Butea superba</i>              | Kadavarballi        | Papilionaceae |

|    |                                  |                         |                  |
|----|----------------------------------|-------------------------|------------------|
| 41 | <i>Caesalpinia bonducella</i>    | Gajjuga                 | Caesalpinaceae   |
| 42 | <i>Caesalpinia minosoides</i>    | Kenjiga                 | Caesalpineae     |
| 43 | <i>Calamus pseudotenuis</i>      | Haludetta               | Palmae           |
| 44 | <i>Calamus rotang</i>            | Nagabetta               | Palmae           |
| 45 | <i>Calamus thwaitesii</i>        | Handibetta              | Palmae           |
| 46 | <i>Calophyllum inophyllum</i>    | Yennehonne              | Guttiferae       |
| 47 | <i>Calophyllum wightianum</i>    | Holehonne               | Guttigerae       |
| 48 | <i>Canarium strictum</i>         | Kaidhupa                | Burseraceae      |
| 49 | <i>Canthium didymium</i>         | Kakkorle, Pyre          | Rubiaceae        |
| 50 | <i>Carallia integerrima</i>      | Andipunar               | Rhizophoraceae   |
| 51 | <i>Careya arborea</i>            | Kowlu                   | Myrtaceae        |
| 52 | <i>Carissa carandus</i>          | Kauli                   | Apocynaceae      |
| 53 | <i>Caryota urens</i>             | Bagani                  | Palmae           |
| 54 | <i>Cassia auriculata</i>         | Avarike tangadi         | Papilionaceae    |
| 55 | <i>Cassia fistula</i>            | Kakke                   | Caesalpineae     |
| 56 | <i>Cassia tomentosa</i>          | Sillange                | Caesalpineae     |
| 57 | <i>Cedrela toona</i>             | Gandhagarige            | Meliaceae        |
| 58 | <i>Celastrus paniculata</i>      | Gowri                   | Celastraceae     |
| 59 | <i>Celtis australis</i>          | Karki                   | Ulmaceae         |
| 60 | <i>Chloroxylon swietenia</i>     | Massivala, Massibalally | Meliaceae        |
| 61 | <i>Chukrasia tabularis</i>       | Kalagarige              | Meliaceae        |
| 62 | <i>Cinnamomum zeylanicum</i>     | Dalchinni               | Lauraceae        |
| 63 | <i>Cipadessa baccifera</i>       | Chittumbe               | Meliaceae        |
| 64 | <i>Clematis gourina</i>          | Arike Hambu             | Ranunculaceae    |
| 65 | <i>Cochlospermum gossypium</i>   | Betta tavare            | Bixaceae         |
| 66 | <i>Colebrookea oppositifolia</i> | Biligurigi              | Labiapaeae       |
| 67 | <i>Cordia macleodii</i>          | Hadaga                  | Boraginaceae     |
| 68 | <i>Cardia myxa</i>               | Challe                  | Boraginaceae     |
| 69 | <i>Cryptolepis buchanani</i>     | Karebantaballi          | Asclepiadaceae   |
| 70 | <i>Dalbergia latifolia</i>       | Beete                   | Papilionacea     |
| 71 | <i>Delbergia paniculata</i>      | Pachali                 | Papilionacea     |
| 72 | <i>Dendrocalamus strictus</i>    | Kirubidaru              | Graminae         |
| 73 | <i>Dichrostachys cinerea</i>     | Vadivara                | Mimoceae         |
| 74 | <i>Dillinia pentagyna</i>        | Kalthega, Kanigalu      | Dilleniaceae     |
| 75 | <i>Dipsyros crumanata</i>        | Kantumri                | Ebenaceae        |
| 76 | <i>Dipsyros melanoxyton</i>      | Tupra                   | Ebenaceae        |
| 77 | <i>Dipsyros montane</i>          | Jagalaganti             | Ebenaceae        |
| 78 | <i>Dipsyros paniculate</i>       | Karkoomar, Karmaralu    | Ebenaceae        |
| 79 | <i>Dipterocarpus indicus</i>     | Dhuma                   | Dipterocarpaceae |
| 80 | <i>Diospyros embryopteris</i>    | Kustaraka               | Ebenaceae        |
| 81 | <i>Dodonaea viscosa</i>          | Bandanike               | Sapindaceae      |
| 82 | <i>Dysoxylum malabaricum</i>     | Devagarige, Devadari    | Maliaceae        |
| 83 | <i>Elaeocarpus serratus</i>      | Kyasatta                | Tiliaceae        |
| 84 | <i>Elaeocarpus tuberculatus</i>  | Sttaga, Bhutali         | Tiliaceae        |
| 85 | <i>Eleaeodendron glaucum</i>     | Makarathi               | Celastraceae     |

|     |  |                            |                  |
|-----|--|----------------------------|------------------|
| 86  | <i>Embllica officinalis</i>                      | Nelli                      | Euphorbiaceae    |
| 87  | <i>Erinocarpus nimmonii</i>                      | Adavi-bende                | Tiliaceae        |
| 88  | <i>Erythrina stricta</i>                         | Keechakanamara             | Papilionaceae    |
| 89  | <i>Erythrina suberosa</i>                        | Mullumuttuga, Parivala     | Papilionaceae    |
| 90  | <i>Eugenia zeylanica</i>                         | Meenangi                   | Myrtaceae        |
| 91  | <i>Euonymus dichotomus</i>                       | Kankutle                   | Celastraceae     |
| 92  | <i>Ficus asperrima</i>                           | Garagatti                  | Moraceae         |
| 93  | <i>Ficus benghalensis</i>                        | Ala                        | Moraceae         |
| 94  | <i>Ficus callosa</i>                             | Nlrvala                    | Moraceae         |
| 95  | <i>Ficus glomerata</i>                           | Atthi                      | Moraceae         |
| 96  | <i>Ficus hispida</i>                             | Nirgaragatti               | Moraceae         |
| 97  | <i>Ficus infectoria</i>                          | Basari                     | Moraceae         |
| 98  | <i>Ficus religiosa</i>                           | Arali                      | Moraceae         |
| 99  | <i>Flacourtia montana</i>                        | Hannusampige               | Bixaceae         |
| 100 | <i>Flacourtia sepiaria</i>                       | Miridi                     | Bixaceae         |
| 101 | <i>Garcinia cambogia</i>                         | Kadagolmuraka              | Guttigerae       |
| 102 | <i>Garcinia morelaa</i>                          | Arasingurgi                | Guttigerae       |
| 103 | <i>Garcinia xanthochimus</i>                     | Jeerakanahuli              | Guttigerae       |
| 104 | <i>Gardenia gummifera</i>                        | Bikke                      | Rubiaceae        |
| 105 | <i>Gardenia latifolia</i>                        | Kallagare                  | Rubiaceae        |
| 106 | <i>Garuga pinnata</i>                            | Godda                      | Burseraceae      |
| 107 | <i>Givotia rottiiformis</i>                      | Puliki                     | Euophorbiaceae   |
| 108 | <i>Glycosmis pentaphylla</i>                     | Kadumaralugida             | Rutaceae         |
| 109 | <i>Gmelina arborea</i>                           | Shivini                    | Verbenaceae      |
| 110 | <i>Goochidion zeylanicum</i>                     | Nirsolle                   | Euphorbiaceae    |
| 111 | <i>Grewia tiliaefolia</i>                        | Tadasalu                   | Tiliaceae        |
| 112 | <i>Gymnosparia montana</i>                       | Thandrasi                  | Celastraceae     |
| 113 | <i>Helecteres isore</i>                          | Cowri                      | Tiliaceae        |
| 114 | <i>Hemidesmus Indicus</i>                        | Sogade beru, Sarasaparilla | Asclepeiadaceae  |
| 115 | <i>Hernada repara</i>                            | Holebasari                 | Ephorbiaceae     |
| 116 | <i>Holarrhena antidesentrica</i>                 | Kodachiga, Kodasa          | Apocynaceae      |
| 117 | <i>Holigarna arnottiana</i>                      | Sanneleholegeru            | Arnacardiaceae   |
| 118 | <i>Holigarna beddomei</i>                        | Doddeleholegeru            | Arnacardiaceae   |
| 119 | <i>Hopea parviflora</i>                          | Kiralbogi                  | Dipterocarpaceae |
| 120 | <i>Hopea wightiana</i>                           | Hyga, Haiga                | Dipterocarpaceae |
| 121 | <i>Hydnocarpus wightiana</i>                     | Garudaphala                | Bixaceae         |
| 122 | <i>Hymenodictyon excelsum</i>                    | Doddathoppe                | Rubiaceae        |
| 123 | <i>Ichnocarpus frutescens</i>                    | Karigambu                  | Apocyanaceae     |
| 124 | <i>Kydia calycina</i>                            | Bende                      | Malvaveae        |
| 125 | <i>Lagstroemia flosreginae</i>                   | Holedasavala               | Lythraceae       |
| 126 | <i>Lagstroemia lanceolata</i>                    | Nandi                      | Lythraceae       |
| 127 | <i>Lagstroemia pareiflora</i>                    | Channangi                  | Lythraceae       |
| 128 | <i>Lanea grandis</i><br>( <i>Odinia wodier</i> ) | Godda                      | Anacardiaceae    |
| 129 | <i>Lansium anamallayanum</i>                     | Chigatamari                | Meliaceae        |



|     |                                  |                          |                  |
|-----|----------------------------------|--------------------------|------------------|
| 130 | <i>Lantana camara</i>            | Chandranga               | Verbinaceae      |
| 131 | <i>Lasiosiphon eriocephalus</i>  | Mukkandaka               | Thymelaeaceae    |
| 132 | <i>Lettsomia thomsoni</i>        | Uganihamby               | Convolvulaveae   |
| 133 | <i>Limonia acidissima</i>        | Naibyala                 | Rutaceae         |
| 134 | <i>Linociera malabarica</i>      | Tagadatti, Akkarakal     | Oleaceae         |
| 135 | <i>Litsea zeylanipa</i>          | Sudagenasu               | Lauraceae        |
| 136 | <i>Loranthus longiflorus</i>     | Bandanike                | Loranthaceae     |
| 137 | <i>Macaranga roxburghii</i>      | Chandrakala              | Euphorbiaceae    |
| 138 | <i>Machilus macrantha</i>        | Gulamavu                 | Lauraceae        |
| 139 | <i>Mallotus philippensis</i>     | Bannadamara              | Euphorbiaceae    |
| 140 | <i>Mamena sirige</i>             | Suragi                   | Guttiferae       |
| 141 | <i>Mangifera Indica</i>          | Mavu                     | Anacardiaceae    |
| 142 | <i>Melia camposita (M dubia)</i> | Hebbevu                  | Meliaceae        |
| 143 | <i>Mellia spp</i>                | Vishapuri                | Meliaceae        |
| 144 | <i>Memecylon adule</i>           | Arichapla, Adcheri       | Melastomaceae    |
| 145 | <i>Mesuaferrea</i>               | Nagasampige              | Guttiferae       |
| 146 | <i>Michelia champaca</i>         | Sampige                  | Mangoliaceae     |
| 147 | <i>Mimosa pudica</i>             | Muttideremuni            | Mymoseae         |
| 148 | <i>Mithragyna parvifolia</i>     | Kadavala, Kalam          | Rubiceae         |
| 149 | <i>Mucuna prurita</i>            | Nasaguni                 | Papilionaceae    |
| 150 | <i>Murraya koenigii</i>          | Karibevu                 | Rutaceae         |
| 151 | <i>Myristica malabarica</i>      | Ramapatre                | Myristicaceae    |
| 152 | <i>Nephilium longana</i>         | Sannelekendal            | Sapindaceae      |
| 153 | <i>Ochlandra travancorica</i>    | Vate                     | Graminae         |
| 154 | <i>Ochna squarrosa</i>           | Madli                    | Ochnaceae        |
| 155 | <i>Olea dioica</i>               | Sadle                    | Oleaceae         |
| 156 | <i>Ougeinia delbergioides</i>    | Bettadahonne, Krimutthal | Papilionaceae    |
| 157 | <i>Oxytenanthera stocksii</i>    | Pannangi                 | Graminae         |
| 158 | <i>Palaquium ellipticum</i>      | Hadasale                 | Sapotaceae       |
| 159 | <i>Pandanus odoratissimus</i>    | Kyadige, Kedige          | Pandanaceae      |
| 160 | <i>Pavetta indica</i>            | Pavate                   | Rubiceae         |
| 161 | <i>Phoenix spp.</i>              | Karichalu                | Plamae           |
| 162 | <i>Phoenix sylvestris</i>        | Ichalu                   | Plamae           |
| 163 | <i>Plumeria acutifolia</i>       | Devakanigal              | Apocyanaceae     |
| 164 | <i>Poeciloneuron indicum</i>     | Balagi                   | Trenstroemiaceae |
| 165 | <i>Polyalthia fragrans</i>       | Maragowri                | Anonaceae        |
| 166 | <i>Pongamia pinnata</i>          | Honge                    | Papilionaceae    |
| 167 | <i>Premna tomentosa</i>          | Eji, Narave              | Verbenaceae      |
| 168 | <i>Psychotria flavida</i>        | Vatemadikay, Kankalli    | Rubiaceae        |
| 169 | <i>Pterocarpus marsupium</i>     | Honne                    | Papilionaceae    |
| 170 | <i>Pterospemum suberifolium</i>  | Sownamara                | Sterculiaceae    |
| 171 | <i>Putrangiva roxburghii</i>     | Putranjeeva              | Euophbiaceae     |
| 172 | <i>Randia dumentorum</i>         | Kare                     | Rubiaceae        |
| 173 | <i>Saccopetalum tomentosum</i>   | Ubalu                    | Anonaceae        |
| 174 | <i>Salix tetrasperma</i>         | Niranji                  | Salicaceae       |

|     |                                 |                                |                  |
|-----|---------------------------------|--------------------------------|------------------|
| 175 | <i>Santalum album</i>           | Sri Gandha                     | Santalaceae      |
| 176 | <i>Sapindus emarginatus</i>     | Antavala                       | Sapindaceae      |
| 177 | <i>Saraca indica</i>            | Asoka                          | Caesalpinae      |
| 178 | <i>Schleichera oleosa</i>       | Kendala, Kusum, Sagade         | Sapindaceae      |
| 179 | <i>Schredera swietenoides</i>   | Gante                          | Oleaceae         |
| 180 | <i>Semecarpus anacardium</i>    | Kadugeru                       | Anacardiaceae    |
| 181 | <i>Shorea talura</i>            | Jalari, Jala, Jalgiri          | Dipterocarpaceae |
| 182 | <i>Smilax prolifera</i>         | Karinarigedde                  | Liliaceae        |
| 183 | <i>Soymida febrifuga</i>        | Some                           | Meliaceae        |
| 184 | <i>Spatholobus roxburghii</i>   | Kadavarehamabu                 | Papilionaceae    |
| 185 | <i>Spondias mangifera</i>       | Amate                          | Anacardiaceae    |
| 186 | <i>Sterculia foetida</i>        | Peenari                        | Sterculiaceae    |
| 187 | <i>Sterculia guttata</i>        | Hulithoradu, Hulimara          | Sterculiaceae    |
| 188 | <i>Sterculia urens</i>          | Savige                         | Sterculiaceae    |
| 189 | <i>Sterculia villosa</i>        | Bildale                        | Sterculiaceae    |
| 190 | <i>Stereospermum personatum</i> | Kaladri                        | Bignoniaceae     |
| 191 | <i>Stereospermum xylocarpum</i> | Genasu                         | Bignoniaceae     |
| 192 | <i>Stereospermum spp.</i>       | Kadunugge                      | Bignoniaceae     |
| 193 | <i>Stereospermum suaveolens</i> | Padri                          | Bignoniaceae     |
| 194 | <i>Strobilanthus spp.</i>       | Gurgi                          | Acanthaceae      |
| 195 | <i>Strychnos nuxvomica</i>      | Nanjanakoradu, Kasaraka        | Loganiaceae      |
| 196 | <i>Strychnos potatorum</i>      | Chilla                         | Loganiaceae      |
| 197 | <i>Synplocos spicata</i>        | Chunga, Buthagani              | Symplocaceae     |
| 198 | <i>Syzygium cumini</i>          | Neralu                         | Myrtaceae        |
| 199 | <i>Tabernaemontana heyneana</i> | Madlemara, madarasa            | Apocynaceae      |
| 200 | <i>Tectona grandis</i>          | Saguvani                       | Verbenaceae      |
| 201 | <i>Terminalia arjuna</i>        | Bilimathi, Holemathi           | Combrataceae     |
| 202 | <i>Terminalia bellerica</i>     | Tare                           | Combrataceae     |
| 203 | <i>Terminalia chebula</i>       | Alale                          | Combrataceae     |
| 204 | <i>Terminalia tomentosa</i>     | Mathi                          | Combrataceae     |
| 205 | <i>Toddalia aculeata</i>        | Kadumenasu                     | Rutaceae         |
| 206 | <i>Trema orientalis</i>         | Gorakalu, Indian charcoal tree | Ulmaceae         |
| 207 | <i>Trema nudiflora</i>          | Kadukumbala                    | Euphorbiaceae    |
| 208 | <i>Urena lobata</i>             | Kogamani                       | Malvaceae        |
| 209 | <i>Vitex alata</i>              | Nirnaviladi                    | Verbenaceae      |
| 210 | <i>Vitex altissima</i>          | Naviladi                       | Verbenaceae      |
| 211 | <i>Vitex negundo</i>            | Lakkigida                      | Verbenaceae      |
| 212 | <i>Vitis quadrangularis</i>     | Perande                        | Vitaceae         |
| 213 | <i>Wendlandia exerta</i>        | Kansurgi                       | Rubiaceae        |
| 214 | <i>Zanthoxylum rhetsa</i>       | Jummanamara                    | Rutaceae         |
| 215 | <i>Zizyphus jujube</i>          | Elachi                         | Rhamanaceae      |
| 216 | <i>Zizyphus oenoplia</i>        | Sodli (paragi)                 | Rhamanaceae      |
| 217 | <i>Zizyphus regosa</i>          | Bili-mulluhannu                | Rhamanaceae      |
| 218 | <i>Zizyphus xylopyrus</i>       | Chatte, ghotte                 | Rhamanaceae      |

**10. LIST OF VEHICLES:**

| Sl. No. | Vehicle No. | Model         |   |
|---------|-------------|---------------|---|
| 1       | KA-14-G-336 | Mahindra Jeep | Asst. Conservator of Forests.                           |
| 2       | KA-18-G-444 | Mahindra Jeep | Range Forest Officer, Sharavathi Wildlife Range, Kogar. |

**12. LIST OF EXISTING BUILDINGS.**

**I. Officers quarters:**

| Sl. No. | Designation          | No. of Quarters |
|---------|----------------------|-----------------|
| 1       | Range Forest Officer | 2 Nos.          |
| 2       | Foresters            | 2 Nos.          |
| 3       | Forest guards        | 4 Nos.          |
| 4       | Guest house          | 2 Nos.          |
| 5       | Nature camp          | 1 No.           |

**13. LIST OF PLANTATIONS RAISED IN SHARAVATHI VALLEY WILDLIFE SANCTUARY.**

**KARGAL WILDLIFE RANGE**

| Sl. No.                             | Year | Place             | Extent (in Ha) | Speies             |
|-------------------------------------|------|-------------------|----------------|--------------------|
| <b>Raised by Territorial Range.</b> |      |                   |                |                    |
| 1                                   | 1995 | Aralagode         | 11.00          | Acacia             |
| 2                                   | 1986 | Muppane           | 20.00          | "                  |
| 3                                   | 1986 | Bilandhur         | 8.00           | "                  |
| 4                                   | 1987 | Arodi             | 9.00           | "                  |
| 5                                   | 1987 | Sampa             | 10.00          | "                  |
| 6                                   | 1989 | Muppani           | 10.00          | "                  |
| 7                                   | 1990 | Sampa             | 5.00           | "                  |
|                                     |      |                   | <b>73.00</b>   |                    |
| <b>Raised by Wildlife Range:</b>    |      |                   |                |                    |
| 1                                   | 1986 | Madenuru Bl. I    | 5.00           | Fruit bearing tree |
| 2                                   | 1986 | Madenuru Bl. II   | 5.00           | "                  |
| 3                                   | 1986 | Madenuru Bl. I    | 5.00           | "                  |
| 4                                   | 1986 | Madenuru Bl. II   | 5.00           | "                  |
| 5                                   | 1987 | Madenuru Bl. I    | 4.00           | "                  |
| 6                                   | 1987 | Madenuru Bl. II   | 4.00           | "                  |
| 7                                   | 1987 | Muppane Bl. I     | 4.00           | "                  |
| 8                                   | 1987 | Muppane Bl. II    | 4.00           | "                  |
| 9                                   | 1987 | Muppane Bl. III   | 8.37           | "                  |
| 10                                  | 1988 | Madenuru Bl. I    | 8.00           | "                  |
| 11                                  | 1988 | Madenuru Bl. II   | 5.36           | "                  |
| 12                                  | 1988 | Muppane Bl. I     | 5.36           | "                  |
| 13                                  | 1988 | Muppane Bl. II    | 5.36           | "                  |
| 14                                  | 1988 | Muppane Bl. III   | 5.36           | "                  |
| 15                                  | 1988 | Muppane Bl. IV    | 5.36           | "                  |
| 16                                  | 1988 | Muppane Bl. V     | 5.36           | "                  |
| 17                                  | 1988 | Muppane Bl. VI    | 5.36           | "                  |
| 18                                  | 1991 | Muppane           | 10.00          | "                  |
| 19                                  | 1994 | Aralagodu         | 10.00          | Acacia             |
| 20                                  | 1996 | Linganamakki I+II | 9.50           | "                  |
| 21                                  | 1994 | Sasichowka        | 4.00           | "                  |
| 22                                  | 1997 | Aralagodu         | 10.00          | "                  |
| 23                                  | 1997 | Vatemakki-Nadodi  | 6.75           | "                  |
| 24                                  | 1997 | Linganamakki      | 10.00          | "                  |
| 25                                  | 1997 | Muppane           | 10.00          | Fruit bearing tree |
| 26                                  | 1997 | Sasichowka        | 9.50           | "                  |
| 27                                  | 1997 | Yethumane         | 7.65           | Acacia             |
| 28                                  | 1997 | Sasichowka        | 2.50           | "                  |
| 29                                  | 1997 | Mandavalli        | 4.50           | "                  |
| 30                                  | 1997 | Linganamakki I+II | 9.50           | "                  |

|   |      |                         |               |                    |
|---|------|-------------------------|---------------|--------------------|
| 31                                      | 1998 | Madenuru-Tedigere       | 2.50          | Hurney plant       |
|   |      |                         | <b>196.29</b> |                    |
| <b>SHARAVATHI WILDLIFE RANGE, KOGAR</b> |      |                         |               |                    |
| <b><u>Raised by Wildlife Range:</u></b> |      |                         |               |                    |
| 1                                       | 1984 | Hosagadde Bl. I+II      | 22.00         |                    |
| 2                                       | 1984 | Biligaru                | 10.00         |                    |
| 3                                       | 1984 | Hosagadde               | 2.00          |                    |
| 4                                       | 1986 | Karini SF               | 5.00          |                    |
| 5                                       | 1986 | Govardhanagri SF        | 10.00         |                    |
| 6                                       | 1987 | Karini SF               | 5.00          |                    |
| 7                                       | 1987 | Nagavalli School forest | 2.00          |                    |
| 8                                       | 1988 | Kanapagaru              | 12.00         |                    |
| 9                                       | 1989 | Kanapagaru              | 10.00         |                    |
| 10                                      | 1990 | Gudumakki               | 5.00          |                    |
| 11                                      | 1991 | Chapparamane-Kanapagaru | 10.00         |                    |
| 12                                      | 1991 | Komanakuri              | 5.00          |                    |
| 13                                      | 1991 | Kogaru-Tumari road      | 8.00          |                    |
| 14                                      | 1991 | Biligaru                | 1.00          |                    |
| 15                                      | 1992 | Hosagadde-Kanapagar     | 10.00         |                    |
| 16                                      | 1983 | Biligaru                | 30.00         | Trench mound       |
| 17                                      | 1983 | Biligaru                | 20.00         | "                  |
| 18                                      | 1983 | Yerekatte               | 15.00         | "                  |
| 19                                      | 1983 | Biligaru                | 14.00         | "                  |
| 20                                      | 1983 | Kattinakar              | 20.00         | "                  |
| 21                                      | 1982 | Biligaru                | 30.00         | "                  |
| 22                                      | 1982 | Biligaru                | 8.00          | "                  |
| 23                                      | 1971 | Govardhanagiri          | 38.05         | Gap plantation     |
| 24                                      | 1971 | Konjivalli              | 80.97         | F.G.S.             |
| 25                                      | 1971 | Govardhanagiri          | 18.21         | Teak               |
| 26                                      | 1971 | Karini                  | 40.48         | R.D.F.             |
| 27                                      | 1972 | Govardhanagiri          | 38.05         | Gap plantation     |
| 28                                      | 1972 | Nagavalli               | 2.02          | Match wood         |
| 29                                      | 1972 | Karini                  | 40.48         | Gap plantation     |
| 30                                      | 1972 | Govardhanagiri          | 38.05         | Gap plantation     |
| 31                                      | 1976 | Hosagadde               | 193.43        | Match wood         |
|   |      |                         | <b>743.74</b> |                    |
| <b><u>Raised by Wildlife Range:</u></b> |      |                         |               |                    |
| 1                                       | 1987 | Yennehole Bl. I         | 5.36          | Fruit bearing tree |
| 2                                       | 1987 | Kattinakar Bl. I        | 5.36          | "                  |
| 3                                       | 1987 | Kattinakar Bl. II       | 3.60          | "                  |
| 4                                       | 1987 | Hosagadde Bl. I         | 5.36          | "                  |
| 5                                       | 1988 | Hosagadde Bl. II        | 5.36          | "                  |
| 6                                       | 1988 | Yennehole Bl. I         | 5.36          | "                  |
| 7                                       | 1988 | Kanuru Bl. I            | 5.36          | "                  |

|                      |      |                          |               |                    |
|----------------------|------|--------------------------|---------------|--------------------|
| 8                    | 1988 | Kanuru Bl. II            | 5.36          | “                  |
| 9                    | 1988 | Kanuru Bl. III           | 5.36          | “                  |
| 10                   | 1988 | Kattinakar               | 3.80          | “                  |
| 11                   | 1988 | Kanuru                   | 5.60          | “                  |
| 12                   | 1988 | Hosagadde                | 5.60          | “                  |
| 13                   | 1991 | Kattinakar               | 10.80         | “                  |
| 14                   | 1997 | Padubee                  | 10.00         | Acacia             |
| 15                   | 1997 | Blinachakadu Alem        | 6.00          | “                  |
| 16                   | 1997 | Hosagadde Bl. I, II, III | 3.60          | “                  |
| 17                   | 1997 | Kattinakar               | 3.00          | “                  |
| 18                   | 1997 | Kattinakar               | 17.50         | Fruit bearing tree |
| 19                   | 1997 | Yennehole                | 6.00          | “                  |
| 20                   | 1997 | Korikodlu                | 4.20          | “                  |
| 21                   | 1997 | Kogaru Shola Bl. I       | 1.50          | “                  |
| 22                   | 1999 | Kogaru Shola Bl. II      | 1.50          | “                  |
| 23                   | 1999 | Kattinakar Shola Bl. I   | 1.50          | “                  |
| 24                   | 1999 | Kattinakar Shola Bl. II  | 1.50          | “                  |
| 25                   | 1999 | Kattinakar Shola Bl. III | 0.20          | “                  |
| 26                   | 1999 | Channakodu Shola         | 1.20          | “                  |
| 27                   | 1999 | Alem                     | 0.50          | “                  |
| 28                   | 1999 | Alem                     | 0.85          | “                  |
| 29                   | 1999 | Alem                     | 1.50          | “                  |
| 30                   | 1999 | Alem                     | 1.50          | “                  |
| 31                   | 1999 | Alem                     | 0.20          | “                  |
|                      |      |                          | <b>134.53</b> |                    |
| <b>Raised by MPM</b> |      |                          |               |                    |
| 1                    | 1991 | Biligaru Bl. I           | 6.50          | Fruit bearing tree |
| 2                    | 1991 | Biligaru Bl. I           | 0.50          | “                  |
| 3                    | 1991 | Biligaru Bl. II          | 3.00          | “                  |
| 4                    | 1991 | Biligaru Bl. II          | 8.00          | “                  |
| 5                    | 1991 | Biligaru Bl. II          | 16.00         | “                  |
| 6                    | 1991 | Kanapagaru Bl. I         | 22.40         | “                  |
| 7                    | 1991 | Kanapagaru Bl. I         | 6.80          | “                  |
| 8                    | 1991 | Kanapagaru Bl. I         | 5.60          | “                  |
| 9                    | 1991 | Kanapagaru Bl. I         | 0.20          | “                  |
| 10                   | 1991 | Kanapagaru Bl. I         | 13.50         | “                  |
| 11                   | 1991 | Hosagadde                | 10.80         | “                  |
| 12                   | 1991 | Konjavalli               | 8.00          | “                  |
| 13                   | 1991 | Konjavalli               | 1.00          | “                  |
| 14                   | 1991 | Konjavalli               | 2.00          | “                  |
| 15                   | 1991 | Konjavalli               | 9.00          | “                  |
| 16                   | 1992 | Padubee (Kattinakar)     | 34.00         | “                  |
| 17                   | 1992 | Aramanekoppa             | 10.20         | “                  |
| 18                   | 1992 | Kanchigadde              | 17.00         | “                  |
| 19                   | 1992 | Aramanekoppa             | 6.00          | “                  |

|    |      |              |               |   |
|----|------|--------------|---------------|---|
| 20 | 1992 | Aramanekoppa | 0.80          | “ |
| 21 | 1991 | Hosagadde    | 0.20          | “ |
|    |      |              | <b>181.50</b> |   |

**14. LIST OF VILLAGES IN SHARAVATHI WILDLIFE SANCTUARY.**

| Kargal Wildlife Range, Kargal |                  | Sharavathi Wildlife Range, Kogaru |            |
|-------------------------------|------------------|-----------------------------------|------------|
| 1                             | Bidarur          | 1                                 | Nagavalli  |
| 2                             | Karumane         | 2                                 | Nalahari   |
| 3                             | Aralagodu        | 3                                 | Gudihithlu |
| 4                             | Mandavalli       | 4                                 | Baliga     |
| 5                             | Bannumane        | 5                                 | Banaukuli  |
| 6                             | Kopparagi        | 6                                 | Kanapagaru |
| 7                             | Brahmana Elakale | 7                                 | Kattinkar  |
| 8                             | Thalalakale      | 8                                 | Uralagallu |
| 9                             | Muppani          | 9                                 | Karani     |
| 10                            | Aravadi          |                                   |            |
| 11                            | Kippad           |                                   |            |
| 12                            | Ambaragodlu      |                                   |            |
| 13                            | Kagarasi         |                                   |            |
| 14                            | Hedathri         |                                   |            |
| 15                            | Kerodi           |                                   |            |