# ANNUAL REPORT

2016-17

# KAKATIYA ZOOLOGICAL PARK, WARANGAL













# **CONTENTS**

- **❖** ABOUT ZOO
- **\*** VISON
- **\*** MISSION
- **\*** OBJECTIVES
- **❖** ESTABLISHMENT/STAFF PATTERN
- **\*** ACHIEVEMENTS:
  - o NEW MEMBERS ADDED
  - o CONSERVATION BREEDING
  - o RESCUE OPERATION
  - o ANIMAL ADOPTION SCHEME
  - MAJOR WOKS CARRIED OUT IN2016-17
- **\*** ZOO EDUCATION
- **\*** HEALTH AND NUTRITION
- **❖ VISITATION AND REVENUE**
- **❖** ANIMAL INVENTORY
- **\*** ANNEXURES
- **❖** DIET CHART
- **\*** LIST OF PLANTS IN ARBORETUM

## **ZOO REPORT**

Ex-situ conservation is the preservation of components of biological diversity outside their natural habitats. This involves conservation of genetic resources, as well as wild and cultivated or species, and draws on a diverse body of techniques and facilities. Such strategies include establishment of botanical gardens, zoos, conservation strands and gene, pollen seed, seedling, tissue culture and DNA banks.

The Kakatiya Zoological Park was established in the year 1985; the Governor of Andhra Pradesh Dr. Shankar Dayal Sharma laid the foundation stone for this Wilderness area and named it as "Vana Vignan Kendra". It is spread over an area of 19.22 Ha. This was initially recognized as Mini Zoo and due to good efforts for its development made by the Department; it was upgraded as Small Zoo by the Central Zoo Authority of India on 01.01.2014. In due course, the Zoo has acquired a many speceies of Mammals, Birds and Reptiles

Over the period, the Vana Vigyana Kendra has became a Small zoo in the Telangana state, with the following distinctions: Scientific layout, Adequate water, good veterinary care, visitors amenities, specialties like Chowsingha and Ostrich successful breeding, Butterfly Park, , Environment Education Centre etc.

At present there are 16 normal enclosures, 20 cages and 2 moated enclosures and exhibits 383 spp of different animals. It is a place of relief and recreation like Picnic Spot as well as Environmental Education Center. It is a right place to educate the students and citizens about nature by bringing them close to Wild Life and this place also few recreational values. Students from different institutions' visit this zoo and different awareness programs are organized by Zoo to educate them.

## **ABOUT THE ZOO:**

Warangal is one of the most important historical places in the Telangana state. It is attracting many people by its rich heritage and historical values. It was ruled by the Kings of Kakatiya dynasty. The famous among the dynasty were Rudramadevi and Prathaparudra, they constructed Thousand Pillars Temple, BadraKali Temple, Siddeshwara Temple, Padmakshi Temple, Mettu Ramalingeshwara Temple, Ramappa Temple, Laknavaram Tank etc.,

The Forest department with the help of district administration had set up a Zoological Park called Vana Vigyan Kendra in order to enrich awareness about wildlife conservation i.e., Ex-situ conservation of Wildlife. It is a place of relief and recreation like Picnic Spot as well as Environmental Education Center. It is a right place to educate the students and citizens about nature by bringing them close to Wild Life and this place also few recreational values.

The Kakatiya Zoological Park which was earlier knows as Vana Vigyan Kendra, is a wilderness zone in the heart of the concrete jungle of tri cities of Kazipet, Hanamkonda, Warangal where one is assured of peace and tranquility by its thick tree growth.

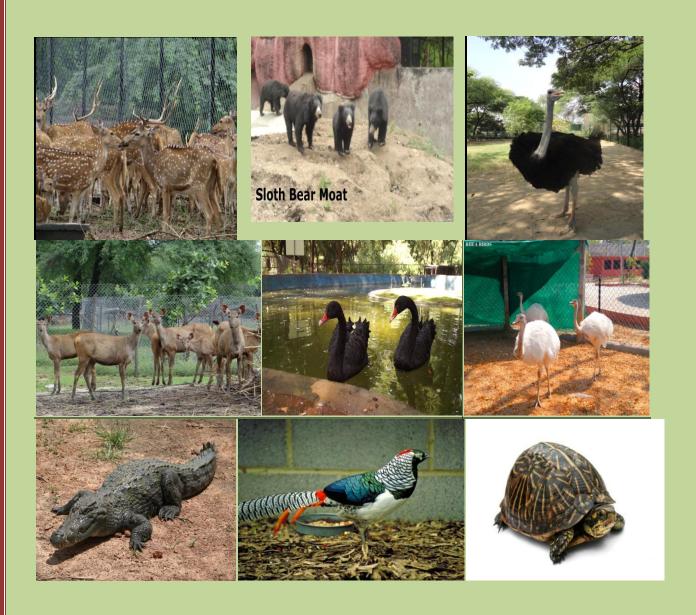
The then Governor of Andhra Pradesh **Dr. Sri Shankar Dayal Sharma** laid the foundation stone for this Wilderness area and named it as Vana Vigyan Kendra on 16-01-1985. Since then in phased manner this Vana Vigyan Kendra has been developed by the Forest Department. During 1987 Sri Muddu Krishnama Naidu the then Minister for Forest and Environment opened, Birds and Reptiles enclosures to the Public. In the year 1988 Children's Play area was set up and equipped. It was proposed to construct more number of enclosures to display the animals in their natural surroundings.

The Kakatiya Zoological Park, Warangal is supported by EEC where people can learn more about the Nature and its diversity especially on Wild Animals. The EEC also educating people by conducting celebration slide and Film shows about Wild Life.

This Kakatiya Zoological Park began expanding slowly with addition of new enclosures every year. Central Zoo Authority of India recognized the Vana Vigyana Kendra as a **Mini Zoo** vide Ref.No. F.No. 19-141/93-CZA (7) (M), Dt: 21-02-2006. due to good efforts for its development made by the Forest Department, it was upgraded as **Small Zoo** by the Central Zoo Authority of India on 01.01.2014.

Proposals have been sent to the Central Zoo Authority of India, New Delhi for up gradation of this Zoo from Small Zoo to Medium Zoo category, it has the eligible parameters as per the Central Zoo Authority norms.

The name of Vana Vigyana Kendra (Small Zoo), Warangal has been renamed as Kakatiya Zoological Park, Warangal by State ZAPAT Committee and Inaugurated by Hon'ble Deputy Chief Minister of Telangana State on 01.03.2017



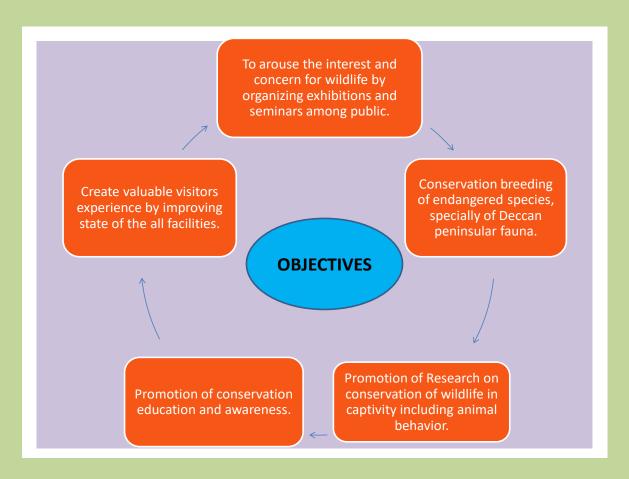
## **VISION OF THE ZOO**

Vision is to protect, preserve and conserve the diversity of species through ex-situ conservation and connect people with Nature

## **MISSION OF THE ZOO:**

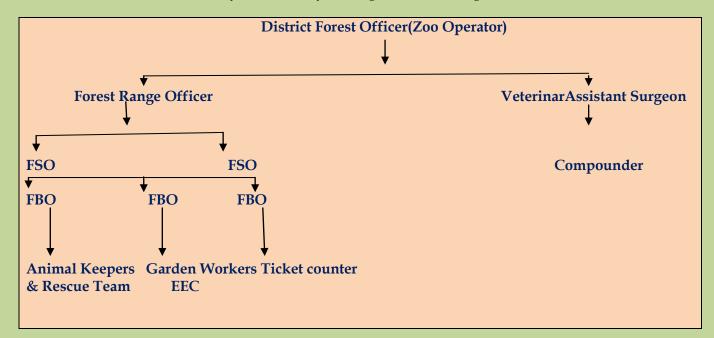
The mission of setting Kakatiya Zoological Park, Warangal is takingup ex-situ. Conservation of endangered fauna, with special emphasis on Deccan Peninsular fauna, research on wildlife behavior and to foster wildlife education among the Public

## **OBJECTIVES:**



## **ESTBLISHMET/STAFF PATTERN**

Kakatiya Zoological Park, Warangal is headed by the District Forest Officer, Warangal (Urban) district assisted by Forest Range Officer, in day to day maintenance of the Zoo. The zoo has two sections namely Animal Section and Garden Section.. The Hierarchy of the Kakatiya Zoological Park, Warangal is as follows



S.No	Designation	Duties and resposiblities
1	District Forest Officer Warangal Urban & jangaon	Zoo Operator
2	Forest Range Officer	In-charge Zoo Park
3	Forest Section Officer (O.D Basis)	Maintenance of Lawns and Gardens, Clearing supervision, execution of ZAPAT Scheme Works
4	Forest Section Officer	Animal Protection, Clearing supervision, execution of CAMPA Scheme Works
5	Forest Beat Officer	Animal Protection, Clearing supervision,
6	Forest Beat Officer	EEC Building, Maintenance of Lawns and Gardens, Clearing supervision,
7	Forest Beat Officer	Ticket issuing
8	Veterinary Assistant Surgeon on honorarium basis	Monitoring the health care of the Animals and Rescue Operations
9	Compounder	Monitoring the health care of the Animals and Rescue Operations
10	Computer Operator	Office support and Maintenance of Office records & Files

## **ACHIEVEMENTS:**

## 1. NEW MEMBERS ADDED

04 New species were added to the collection of Kakatiya Zoological Park, Warangal. In total 06 Males and 06 females of various species were added as below

S.No	Name of the	Ratio (M:F)
	animal	
1	Mouse Deer	2:2
2	Green Iguana	2:2
3	Jungle Cats	1:1
4	Leopards	1:1

## **20 CONSERVATION BREEDING:**

### 1. Four horned Antelope (Chowsingha)

Four horned Antelope (Chowsingha) brought from Tadvai, which rescued and kept in this Zoo in the year 2007. After that one more rescued Chowsingha kept in the same enclosure and made a

separation from another species to develop the breed. Since then horned Antelope are breeding. This zoo has been improving the conservation of breeding activity of this species.





## 2. Breeding of Ostrich:

For the first time, Ostrich bred in the Zoo in 2013Since then Ostrich are breeding regularly in the Zoo.

During the past 30 years the Zoo has bred a number of species in captivity. Many of them are endangered as per the Wildlife (protection) Act 1972. Some of them are Mugger Crocodile, Four horned Antelope, Black buck, pea fowl, Red jungle fowl, silver pheasant etc., Many exotic species were also bred like Ostrich and others.

The Jackals are breeding regularly in this zoo,





## 3) RESCUE OPERATIONS:

Rescue team of Kakatiya Zoological park is very active in doing rescue operations in and around Warangal. One Panther was rescued at Illanthakunta , Four Bears from Karimnagar and Warangal Districts, Five Jackals of Warangal District and many pythons, Sand Boas, Rare owls, Peacocks, Chowsingha rescue from surrounded villages of Warangal Districts



## 4) ANIMAL ADOPTION SCHEME;

To involve the General public in the conservation movement and to create the sense of ownership to the Animal conservation activities, adaptation programme has been launched in the Zoo and it has been receiving by the Citizens.

S1. Name of the Enclosure/		Main	No.of Animals/		
No.	Animal	Annual	Half Yearly	Quarterly	Birds available
1	Leopard	2,00,000	1,00,000	50,000	2
2	Jackals	72,000	36,000	18,000	4
3	Ostrich	62,000	31,000	16,000	3
4	White Rhea Bird	62,000	31,000	16,000	3
5	Sloth Bears	52,000	26,000	13,000	4
6	Crocodile	36,000	18,000	9,000	5
7	Jungle Cat	32,000	16,000	8,000	2
8	Sambar Deer	12,000	6,000	3,000	18
9	Nilgai	12,000	6,000	3,000	4
10	Mouse Deer	10,000	5,000	3,000	5
11	Spotted Deer	8,000	4,000	2,000	76
12	Black Buck	8,000	4,000	2,000	9
13	Swans - White/ Black	8,000	4,000	2,000	3
14	Green Iguana	5,000	3,000	1,000	4
15	Chowsinga	4,000	2,000	1,000	13
16	Star Tortoise, Red Eared Turtle & Turtle	800	400	200	42
17	Peafowl (Peacock)	1000	500	250	15
18	White Peafowl (Peacock)	1000	500	250	3
19	Pheasants	800	400	200	7
20	Jungle fowls	800	400	200	12
21	Pigeons	800	400	200	45
22	Parrots	500	300	150	22
23	Love Birds	500	300	150	35
24	Mandrine Duck	500	300	150	1
25	Sun conure & Cockatiels	400	200	100	31

#### What you will get in return

- Name & Photo of adopter will be displayed next to the animal enclosure.
- ❖ Adopters will be allowed to view the animals from the close quarters of the animal enclosure / animals/ birds you have adopted.
- ❖ In case the students of a school adopt an animal (Mentioned from Sl.No. 1 to 25) by paying the adoption cheques, (50) students below (12) years of age from the school will be allowed free of charges along with (5) Staff members in a year.
- Participate in interactive feeding sessions.

#### LIST OF ANIMALS ADOPTED:

s.NO	NAME OF THE PERSON	ADOPTED ANIMAL/BIRD	ANNUALLY/ HALF YEARLY/ QUARTERLY	AMOUNT
1	M/S VEENUS JEWELLERS	NILGAI-4, MOUSE DEER-5, PIGEONS-27, SUNCONURE & COCKTIELS-1	ANNUALLY	120000
2	M/S BHAVAN DIGITALS	CHOWSINGHA	QUARTERLY	1000
3	R. NARESH REDDY	MANDRINE DUCK	ANNUALLY	500
4	CH. SRIDHAR	LOVE BIRD	ANNUALLY	500
5	V. SRINIVASA RAO	PARROT	ANNUALLY	500
6	CH. SUDHEER REDDY	CHOWSINGHA & PEACOCK	ANNUALLY	5000
7	N. SREEDHAR	PEACOCK	ANNUALLY	1000
8	WALKERS ASSOCIATION	LEOPARD	QUARTERLY	50000
			TOTAL:	178500

## 5) WORKS CARRIED OUT DURING 2016-2017:

All the works were carried out as per approved APO of ZAPAT and BDC Component of CAMPA APO. Regular maintenance works were carried out.

Major works carried out are:

- ✓ Construction of leopard enclosure and mouse deer enclosure
- ✓ Introduction of one pair of leopard
- ✓ The name of zoo was changed from van Vigyan Kendra to kaktiya zoological park
- ✓ Battery Vehicle was purchased and
- ✓ CCTV cameras were installed to ensure the security in the zoo.
- ✓ An Arboretum of 90 native spp was established
- ✓ Rachabandas in karthik Vanam and near EEC building was constructed.

## **ZOO EDUCATION:**

Zoo not only place for Visitors to have fun, but a place to learn. Zoo is educating visitors about conservation of wildlife and their importance in nature through various methods, which includes celebration of various important days World Earth day, Biodiversity day, World environment day, World wetland day, world sparrow day and international tiger day, trainings, snake shows etc.,

Special audio visual classes are conducting in environment education centre of the Zoo and conducting painting, Essay writing, Quiz, Elocution competitions among school children for creating awareness about the wildlife.



## Events conducted in Kakatiya Zoological Park, Warangal during 2016-17

S.No	Date	Name of the Event	
1	03.03.2016	World Wildlife Day	
2	21.03.2016	World Forest Day	
3	22.04.2016	World Earth Day	
4	22.05.2016	International Biodiversity Day	
5	05.06.2016	World Environment Day	
6	29.07.2016	International Tigers Day	
7	01.10.2016 to 07.10.2016	Vanyaprani Saptah	

## **HEALTH AND NUTRITION**

There are 44 species of Mammals, Birds and Reptiles requiring a variety of food such as beef, Chicken, Eggs for the carnivores, Fruits, Vegetables and Cereals for Birds, Leaves and Fodder for Herbivores. The required feed is produced through suppliers on tender basis. The animals are provided with balanced diet. Depending on specific requirement of the animals as per the advise of Veterinarian. The supplements like., nutrition, vitamins and minerals are added to the feed. Two grass plots of CO-I, CO-II and Para grass is raising for sustainability supply of fodder to the herbivores. (feed chart enclosed)

## **VISITATION AND REVENUE:**

## **VISITATION**

The Kakatiya Zoological Park, Warangal is open for public from Tuesday to Sunday (6 Days) and every Monday is zoo holiday.

## **Entry fee**

• Rs. 20/- per Adults, Rs. 10/- for Children (Below 12 years).

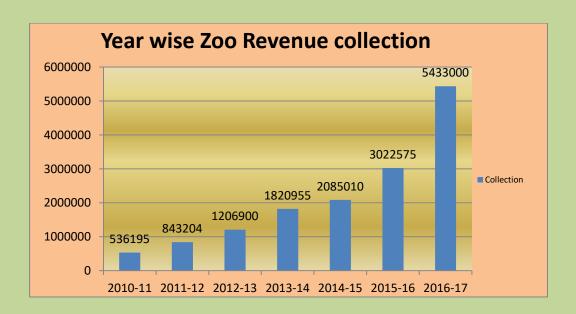
There is a Battery Operated Vehicle for those interested people to ride in the Zoo.

- Rs. 30/- for Adults and Rs. 20/- for Children.
- For the Photographers Rs. 10/- for Normal Cameras .

# Year wise Number of Visitors and Revenue Collection of Kakatiya Zoological Park, Warangal from 2010-11 to 2016-17

S.No	Year	Adults	Childrens	Camera	Total Visitors	Total Revenue collection
1	2	3	4	5	6	7
1	2010-11	87186	26139	116	113325	536195
2	2011-12	88997	23314	81	112311	843204
3	2012-13	90240	32503	81	122743	1206900
4	2013-14	136599	46508	533	183107	1820955
5	2014-15	163789	53762	574	217551	2085010
6	2015-16	199582	58963	748	258545	3022575
7	2016-17	239323	71877	1088	311200	5433000
	Total	1005716	313066	3221	1318782	14947839





## Visitors' amenities

- ↓ There is a one water Cooler R.O. plant with automatic Aqua guard filter units
- Butterfly park., Karthik vanam, seating benches, pagodas etc.
- ↓ The space available for parking vehicles outside the Zoo is sufficient now. .
- **one** battery operated visitors' vans are to be introduced in the Zoo for taking visitors around the Zoo from the main gate.
- ↓ The children corner is to the right, immediately after Entry. This is a sprawling area with lawns, and play pen.
- ♣ To cater to the needs of visitors, a Canteen was provided in the Zoo.

# **INVENTORY:**

The animal exhibits in the Kakatiya Zoological Park, Warangal(KZP) has been arranged to showcases different species based on broad classification like., carnivores, omnivores, herbivores, Birds and Reptiles. The Kakatiya Zoological Park, Warangal houses 44 species with 383 specimens.

S. No	SPECIES	Scientific Name	MALE	FEMALE	YOUNG	TOTAL
I	MAMMALS					
1	* Leopard	Panthera pardus	1	1	0	2
2	* Cat Jungle	Felis chaus	1	1	0	2
3	* Jackal	Canis aureus	2	2	6	10
4	* Bear Sloth	Ursus ursinus	2	2	0	4
5	Deer Sambar	Cervus unicolor	5	12	2	19
6	Deer Spotted (Chital)	Axis axis	34	44	2	80
7	Nilgai (Blue Bull)	Boselaphus tragocamelus	1	2	1	4
8	* Black Buck (Krishna Mrig)	Antilope cervicapra	1	6	4	11
9	* Deer Mouse	Moschiola indica	2	2	0	4
10	* Antelope Four Horned (Chowsingha)	<u>Tetracerus</u> <u>quadricornis</u>	3	8	2	13
	Total	-	52	80	17	149
II	REPTILES	_				
1	Tortoise Indian Star	<u>Geochelone</u> <u>elegans</u>	4	4	4	12
2	* Iguana (Green Lizard)	<u>Iguana iguana</u>	0	0	4	4
3	* Crocodile Marsh (Mugger)	<u>Crocodylus palustris</u>	1	2	2	5
4	* Turtle Fresh Water (Indian soft shelled)	<u>Lissemys punctata</u> <u>punctata</u>	5	8	2	15
5	Terrapin Red Eared (Turtle)	<u>Trachemys</u> <u>scripta</u> <u>elegans</u>	4	6	9	19
	Total		10	16	13	55
III	BIRDS					
1	* Peafowl (National Bird)	<u>Pavo</u> <u>cristatus</u>	6	8	1	15
2	Parakeet Rose ringed	<u>Psittacula</u> <u>krameri</u>	5	6	0	11
3	Parakeet Blossom headed	Psittacula cyanocephala	2	2	0	4
4	Parakeet Alexandrine	Psittacula eupatria	3	1	0	4
5	Cockatiel Lutino	Nymphicus hollandicus	4	6	1	11
6	Grey Cockatiel	Nymphicus hollandicus	5	5	1	11
7	Pied Cockatiel	Nymphicus hollandicus	3	3	0	6
8	* Pheasant Kalij	Lophura leucomelana	1	1	0	2
9	Dove Australian White	Columbiformes	1	2	0	3
10	Conure Sun / Sun parakeet	Aratinga solstitialis	0	1	0	1
11	Rhea (White)	Rhea pennata	1	2	0	3
12	,		3	3	2	8
	Love Birds (Lutino)	Agapornis sps				
13	Love Birds (Peach faced)	<u>Agapornis</u> <u>sps</u>	8	9	4	21
14	Love Birds (Fischers)	Agapornis sps	3	3	0	6
15	Duck Mandrine	Aix galericulata	0	1	0	1
16	Lorikeet Rainbow (Red Collared Lory)	<u>Trichoglossus</u> <u>rubritorquis</u>	1	0	0	1
17	Swan Mute (White)	<u>Cygnus</u> <u>olor</u>	1	0	0	1
18	* Fowl Jungle Grey	<u>Gallus</u> <u>sonneratii</u>	2	3	0	5
19	Myna Common	<u>Acridotheres</u> <u>tristis</u>	1	1	0	2
20	Ostrich	Struthio camelus	1	2	0	3
21	Pigeon Blue Rock	<u>Columbidae</u> <u>colombiformes</u>	18	20	2	40

22	Parakeet Mustache	Psittacula alexandri	1	1	0	2
23	Pheasant Silver	<u>Lophura</u> <u>nycthemera</u>	1	1	0	2
24	* Peafowl White	<u>Pavo</u> <u>cristatus</u>	1	1	0	2
25	Pheasant Yellow golden	Chroysolophus pictus	0	1	0	1
26	Fowl Jungle Red	<u>Gallus</u> gallus	3	2	2	7
27	Pheasant Lady amrhest	<u>Chrysolophus</u> <u>amrhestiae</u>	1	1	0	2
28	Swan Black	<u>Cygnus</u> <u>atratus</u>	1	1	0	2
29	Fantail pigeon	_	1	1	0	2
			28	31	4	179
	Grand Total		90	127	34	383



**Inauguration of Battery Operated Vehicle** 



**Inauguration of Leopard Enclosure** 









# ANNEXURE-1

## Feed Chart 2017-18 for Animals & Birds in Kakatiya Zoological Park, Warangal

S.No	Animals & Birds Name	For Each Animal / Bird	Feed Name	Unit	Quantity per Each animal per Day
1	Leopard	1	Beef	Kg	3
			Milk	Litres	1
			White Jowar Ravva	Kgs	1
			Eggs	Nos	1
2	Sloth Bears	1	Honey	gms	30
2	Sioth bears	_	Bread	Kgs	1
			Banana	Nos	1
			Carrot	gms	250
			Tomato	gms	100
3	Jackal	1	Beef	Kgs	1
4	Jungle Cat	1	Beef Chopped	Kgs	0.25
4	Juligle Cat	1	Country Bird	Each	Weekly Once
5	5 Spotted Deers	1	Cattle feed	Kgs	1
J		_	Hay	Kgs	Adlibitum
6	Sambars	1	Cattle feed	Kgs	1.50
7	Chowsingha	1	Cattle feed	gms	500
8	Black Buck	1	Cattle feed	Kgs	1
9	Nilgai	1	Cattle feed	Kgs	1.50
			Apple -	gms	50
			Banana -	gms	100
10	Mouse Deer	1	Carrot -	gms	50
10	Mouse Deel	1	Sweet Potato	gms	50
			Black Gram-	gms	50
			Horse Gram-	gms	50
11	Crocodiles	1	Boneless Beef	gms	600
12	Star Tortoise	1	Chana	gms	10
12	3141 10110130	_	Cucumber	gms	20
13	Turtles	1	Chana	gms	10
		-	Cucumber	gms	20
14	Red Eared Turtle	1	Chana	gms	10
17	ned Edica fullie	1	Cucumber	gms	20
15	Green Iguana	1	Palakura	Kgs	0.075
	C. Con Igaana	_	Cabbage	Kgs	0.075

				Apples	Kgs	0.075
				Papaya	Kgs	0.075
				Wheat	Kgs	0.25
	1.0	White & Black	4	Sajjalu	Kgs	0.1
	16	Swans	1	Korralu	Kgs	0.1
				Chana	Kgs	0.1
				Palak	Kgs	1
				Eggs	Nos	4
				Keera Dosa	Kgs	2
				Cabbage	Kgs	0.5
	17	Ostrich Birds	1	Pudina	gms	250
				Curry leaves	gms	250
				Coriander (Kothimeera)	gms	250
				Layer mesh	Kgs	1
				Palak	Kgs	2
				Keera Dosa	Kgs	2
		White Rhea		Cabbage	Kgs	1
			1	Emu Grower Mesh	Kgs	2
	18			Eggs	Nos	4
				Pudina	gms	0.25
				Curry leaves	gms	0.25
				Coriander (Kothimeera)	gms	0.25
:	19	Rose ring parakeets	1	Sun flower seed	gms	15
:	20	Allexandrine Parrots	1	Sun flower seed	gms	20
	21	Blossom headed Parrot	1	Sun flower seed	gms	15
:	22	Mustache parrot	1	Sun flower seed	gms	15
:	23	Red Collared Lory	1	Sun flower seed	gms	20
:	24	Sun Conure	1	Sun flower seed	gms	20
				Sun flower seed	gms	10
	25	Cockatiels	1	Saw flower seeds	gms	5
		Cockaticis		Green leaves (Palak or Lucerne)	gms	10
	26	Peafowls	1	Green leaves (Palak or Lucerne)	gms	50

			Poultry feed	gms	120
27	White Peafowl	1	Green leaves (Palak or Lucerne)	gms	50
			Poultry feed	gms	120
28	Khalij Pheasant	1	Green leaves (Palak or Lucerne)	gms	50
			Poultry feed	gms	120
29	Yellow Golden Pheasant	1	Green leaves (Palak or Lucerne)	gms	50
	Pileasaiit		Poultry feed	gms	120
30	Silver Pheasant	1	Green leaves (Palak or Lucerne)	gms	50
			Poultry feed	gms	120
31	Lady Amherst Pheasant	1	Green leaves (Palak or Lucerne)	gms	50
	riicasaiit	Fileasant	Poultry feed	gms	120
32	Love Birds	1	Green leaves (Palak or Lucerne)	gms	10
33	Pigeons	1	Pigeon / Poultry mixture	gms	50
34	Fan tail pigeon	1	Pigeon / Poultry mixture	gms	50
35	Red Jungle fowl	1	Green leaves (Palak or Lucerne)	gms	50
			Poultry feed	gms	50
36	Grey jungle fowl	1	Green leaves (Palak or Lucerne)	gms	50
			Poultry feed	gms	50
37	White Dove	1	Pigeon / Poultry mixture	gms	50
38	Mandrine Duck	1	Pigeon / Poultry mixture	gms	50

# **ANNEXURE-2: Arboretum of Native Wild Species Plants**

The local wild species of plants are to be planted in the Zoo premises, opposite to the Deer enclosure / adjacent to the Mouse Deer enclosure.

S.No	Valued timber	Small timber	Fuel & pulp wood
	విలుపైన కలప	చిన్న కలప	వంట చెరుకు & కలప గుజ్జు
1	Tectona grandis	Dendrocalamus strictus	Lannea coromandalica
	Verbinaceae	Bombuseae	Anacardiaceae
2	Pterocarpus marsupium	Bambusa arundinacea	Garuga pinnata
2	Papilionaceae	Bambuseae	Burseraceae
3	Gmelina arborea	Cleistanthus collinus	Dalbergia paniculata
3	Verbinaceae	Euphorbiaceae	Paplionaceae
4	Adina cordifolia	Legerstroemia parviflora	Albizzia procera
4	Rubiaceae	Lythraceae	Mimsaceae
5	Mitragyna parvifolia	Polyalthia cerasoides	Albizia amara
3	Rubiaceae	Annonaceae	Mimosaceae
6	Dalbergia latifolia	Chloroxylon swietenia	Balanites roxburghii
0	Papilionaceae	Meliaceae	Balanitaceae
7	Terminalia alata	Acacia leucophloea	Hymenodictyon excelsum
	Combretaceae	Mimosaceae	
			Rubiaceae
8	Madhuka latiflolia	Alangium lamarcki	Erythroxylon monogynum
	Sapotaceae	Alangiaceae	Lineaceae
		ఊడుగు	
			దేవదారు
9	Hardwickia binata	Anogeissus latifolia	Prosopis cineraria
9	cesalpinaceae	Combretaceae	Papilionaceae
	నారేప	తిరుమాను	జమ్మి

	Albizzia odoratissima	Anogeissus acuminata	Givotia rottleriformis
10	Mimoseae	Combretaceae	Euphorbeaceae
	చిందుగ	<u></u>	తెల్ల పొనికి
	Xylia xylocarpa	Dolichandrone falcata	Gyrocarpus jacquini
11	Mimoseae	Bignoniaceae	Combretaceae
	బొజ్జ	ఒద్ధి	కుమ్మరి పొనికి
10	Grewia tiliaefolia	Bauhinia recemosa	Dalbergia lanceolaria
12	Tiliaceae	Caesalpinaceae	Papilionaceae
	తడ	<b>ප</b> ටි	పసరు గన్ని
	Soymida febrifuga	Cordia Myxa	Zyziphus xylopyra
13	Miliaceae	Boraginaceae	Rhamnaceae
	సోమి	<b>ಇ</b> රිకී	గొట్టి
	Schleichera oleosa	Trewia Nudiflora	Randia dumetorum
14	Sapindaceae	Euphorbiaceae	Rubiaceae
	పూసుగు	బొత్కూ	మంగ
15	Sehrebera	Premna tomentosa	Acacia chudra
	swietenoides	Lamiaceae	Mimosaceae
	Oleaceae	నాగూరు	సండ్ర
	మొక్కబు		

	Fruits, nuts & gums	Ornamental	Medicinal
	పండ్లు, గింజలు, జిగుర్లు	ఆకర్శణకు	ఔషధాలకు
1	Aegle marmelos	Cochlospermum	Terminalia arjuna
	Rutaceae	religiosum	Combretaceae
	మారేడు	Bixaceae	ఏరుమధ్ధి
		కొండ గోగు	-
2	Feronia limonea	Bombox ceiba	Strychnos nuxvomica
	Rutaceae	Bombacaceae	Strychnaceae
	ವಲಗ	బూరుగ	

			ముశ్టి
3	Emblica officinalis	Butea monosperma	Strychnos potatorum
	Euphorbiaceae	Papilionaceae	Strychnaceae
	ఉసిరి	మోదుగ	<u> </u>
4	Manilkara hexandra	Ochna obtusata	Wrightia tinctorea
	Sapotaceae	Ochnaceae	Apocynaceae
	<u> </u> ಪ್ರಾಲ	సోనారి	ವಾಲ೯ಡಿಕ
5	Semecarpus	Dillenia pentagyna	Holorrhina
	anacardium	Delleniaceae	antidysenterica
	Anacardiaceae		Apocynaceae
	నల్ల జీడి	3 \$ 0(1)	ఇస్తారి పాల
6	Diospyros melanoxylon	Sterospermum	Terminalia bellerica
	Ebenaceae	chelonoides	Combretaceae
	తునికి	Bignoniaceae	తాని
	ಅನಿಕ	కలకోట	-
7	Bridelia hamiltoniana	Heterophragma	Terminalia chebula
	Phyllanthaceae	roxburghi	Combretaceae
	పంచోద్కము	Bignoniaceae	ŠŎŠ
	aoa a, am	బరె కలగోడు	303
8	Eugenia jambolana	Cassia fistula	Streblus asper
	Myrtaceae	Cisalpinaceae	Moraceae
9	Commiphora caudata	Ixora parviflora	Boswellia serrata
	Burseraceae	Rubiaceae	Burseraceae
10	Buchnania latifolia	Barringtonia acutangula	Sterculia urens
	Anacardiaceae	Barringtoniaceae	Sterculiaceae
11	Careya arborea	Oroxylum inidicum	Morinda tinctoria
	Barringtoniaceae	Bignoniacea	Rubiaceae
12	Gardenia latifolia	Crataeva nurvala	Santalum album
	Rubiaceae	Capparaceae	Santalaceae
13	Zyziphus jujuba	Ougenia dulbergioides	Saraca indica

	Rubiaceae	Papilionaceae	Papilionaceae
14	Carissa Carandas Apocynaceae	Gardenia lucida Rubiaceae	Elaeodendron roxburghii Celastraceae
15	Ficus glomerata Moraceae	Sterculia alata Sterculiaceae	Commiphora wightii Burseraceae



LET'S JOIN HANDS TO SAVE WILDLIFE