

DR. Shyamaprasad Mukherjee Zoological Garden Surat Municipal Corporation Surat, Gujarat



Annual Report for the Year 2021-22

CONTENTS

S.No	Section	Page Number
1.	Report of the Officer-in-charge	3-4
2.	History of the Zoo	5
3.	Vision	5
4.	Mission	5
5.	Objectives	6
6.	About us	6-9
7.	Organizational Chart	10
8.	Human Resources	11
9.	Capacity Building of the Zoo personnel	12
10.	Zoo Advisory Committee	12
11.	Health Advisory Committee	12
12.	Statement of income and expenditure of the Zoo	13
13.	Daily feed Schedule of animals	13-15
14.	Vaccination Schedule of animals	15-16
15.	De-worming Schedule of animals	16
16.	Disinfection Schedule	17
17.	Health Check-up of employees for Zoonotic diseases	18-19
18.	Development Works carried out in the zoo during the year	19
19.	Education and Awareness programmes during the year	19
20.	Important Events and happenings in the Zoo	19
21.	Seasonal special arrangements for upkeep of animals	19
22.	Research Work carried out and publications	20
23.	Conservation Breeding Programme of the Zoo	20
24.	Animal acquisition / transfer / exchange during the year	20-21
25.	Rescue and rehabilitation of the wild animals carried out by the zoo	21
26.	Annual Inventory of animals	22-25
27.	Mortality of animals.	26
28.	Status of the Compliance with conditions stipulated by the Central Zoo Authority	27-29
29.	List of free living wild animals within the zoo premises	30-31

1. Report of the Officer-in-charge

Dr. Shymaprasad Mukerjee Zoological Garden, Sarthana, Surat is one of the medium Zoos of the country. Established on 26th April, 2003 as the first zoological park in the Southern region of the Gujarat State, it has progressively emerged as an eminent and vibrant centre for biodiversity conservation and environmental education. As a primer medium zoo of India, it has spearheaded many significant improvements to provide highest standards of housing, husbandry and health care to the captive wild animals and contributed towards enriching our knowledge on the biology of endangered species.

Surat zoo exemplified the inimitable of ex-situ conservation initiatives. The sprawling zoo houses 49 species of mammals, reptiles and birds. The natural forest areas of Sarthana zoo provide home to a rich assemblage of free-living wild animals including 19 species of mammals, 06 species of reptiles, 21 species of birds, 29 species of butterflies. This is one of the most important plant conservation facilities in the Gujarat State. More than 250 species of plants have been documented in the Sarthana zoo premises.

We have completed another outstanding year of biodiversity conservation, zoo management, education. Sarthana zoo has been an excellent place for eco-tourism which attracted more than 0.153 million visitors during the year 2021-22. There was significant improvement in the infrastructure development, animal collection, health care, fodder production and conservation efforts. Many zoo education and awareness program including Celebration of wildlife week, World wildlife day, World Environment Day, International tiger day were organized during the year 2021-2022. Many species of indigenous and exotic animals including Lion, Black buck, Rhesus Macaque, Mouse deer, Smooth Coated Otter, Sambar, Spotted deer, Painted stork, etc. have breed successfully in the Zoo during the year.

During the year 2021-22 further main entry gate redevelopment work is undertaken, maintenance work regarding civil work, Paintwork is undertaken in zoo.

During this financial year we have welcomed pair of Tiger (Leucistic) (1 Male : 1 Female) , Jackal (1 Male : 1 Female) , Silver Pheasant (1 Male : 1 Female) and Hog Deer (2 Male : 2 Female) From Pradhyuman zoological park , Rajkot in exchange of pair of Smooth Coated otter (1 Male : 1 Female) , Leopard (1 Male : 1 Female), Peafowl (Leucistic) (1 Male : 1 Female), Spoon Bill (1 Male : 1 Female).we have succeful captive breeding of smooth coated Indian otter puppies (2 Female : 2 Male) during this year.

There has been a substantial improvement in the field of health care during the year. This was possible due to sincere efforts by our staff in order to maintain highest standards of health care and animal husbandry practices and close association with college of Veterinary Sciences, Anand and Navsari and also with the valuable advice and guidance of the Nandini Veterinary Hospital, Surat and faculty members of above colleges on important health care issues.

Surat Zoo has always been an outstanding centre for education on various aspects of ex-situ conservation, health care and management of captive wild animals.

Information on various aspects of management and development of Dr Shymaprasad Mukherjee Zoological Garden, Surat during the year 2021-22 has been provided in the present Annual Report. I would like to thank all my staff for their hard work and dedication that made it a successful year in the maintenance and development of Dr. Shyamaprasad Mukharjee Zoological Garden, Surat in the present Covid-19 pandemic condition. I believe that Surat Zoo will continue to grow as a world class zoo and to contribute significantly in the field of wildlife conservation, education and research in coming years.

Zoo Superintendent

Dr. Shymaprasad Mukerjee Zoological Garden Sarthana, Surat, Gujarat State

2. History of the Zoo

Dr. Shymaprasad Mukherjee Zoological Garden, Sarthana, Surat is one of the premier medium Zoo located amidst a beautiful natural setting recognized by Central Zoo Authority, Government of India. Unlike conventional zoos, it spreads over in 81 acres of land with natural vegetation , water bodies and enchanting landscape that provides the zoo inhabitants an appropriate ambience to live in harmony with the nature. It was dedicated to the public on April, 2003. During Year 2021-22 Because of Covid-19 Pandemic situation Zoo is closed for the visitors From 1ST April-2021 To 10th June-2021 and again open from 11TH June for visitors only with limited entry till 22th feb -2022 then after zoo opened with unlimited entry for visitors During this time more than 0.153 million visitors visited the Zoological Park during 2021-22. Most of the animals of Dr.Shyamaprasad Mukharjee Zoological Garden, Surat all animals housed in open, large moated areas surrounded by natural vegetation. This gives them a feeling of living close to their natural habitat.

3. Vision

To complement and strengthen the national efforts in conservation of the biodiversity of the country, particularly the fauna through the ex-situ conservation linked with in-situ practices through

- Fostering sound physical, psychological and social development for the animals in our care.
- Creating an educational environment for all sectors, groups and individuals that develops a unifying bond between our visitors and the animals which inspires appreciation and concern about wildlife and wild places.
- Contributing to worldwide animal management, conservation and research efforts. Improving the quality of our professional development, administration and operating environment.

4. Mission

To connect visitors and animals through exemplary animal welfare and care, best educational and inspirational experiences, fostering public appreciation and support for wild animals and conservation"

To provide better upkeep and veterinary care to the wild animal housed in zoos in India to ensure their conservation through best practices of management and bringing education & awareness among the people.

5. Objective

- To convey the value of conservation through education.
- Captive breeding of endangered species mainly Smooth Coated Indian Otter, Four horned antelope, Sloth Bear.
- To inspire local and global communities to protect, conserve, and celebrate wildlife.
- To provide a fun, unique, and inspirational experience fostering appreciation, knowledge and care for the natural world.
- To ensure thriving as a premier zoological institution, reaching its fullest potential to serve people, animals and the environment.

6. About us

S.No.	Particulars	Information
Basic in	formation about the Zoo	
1.	Name of the Zoo	Dr.Shyamaprasad Mukherjee Zoological Garden
2.	Year Of Establishment	2003
3.	Address Of the Zoo	Opposite Old Sarthana Octroi Naka, Sarthana,
		Surat- Kamrej Road, Surat-395006
4.	State	Gujarat
5.	Telephone Number	+91 6359905032
		+91 6359905033
6.	Fax Number	0261-2451935, 2422110
7.	E-mail address	zoosuperintendent@suratmunicipal.org
		smczoodrrap@yahoo.com
		commissioner@suratmunicipal.org
		commissioner@suratmunicipal.gov.in
8.	Website	www.suratmunicipal.gov.in
		www.suratmunicipal.org
9.	Distance from nearest	Airport : Surat - 23 Kms
		Railway Station : Surat - 7 Kms
		Bus Stand : Surat - 7 Kms
		BRTS : 100 Mtr.
10.	Recognition Valid upto (Date)	19 th August, 2022
11.	Category of Zoo	Medium
12.	Area (in Hectares)	32.78 Hectares
13.	Number of Visitors	Adult : Zoo : 1,53,422
	(Financial Year)	Butterfly park: 10507
		Children:
		Zoo : 35850
		Butterfly Park : 3157
		Total Indian: 1,53,391
		Total Foreigners: 31
		Total Visitors: 1,53,422

4.4	Article de Espellita e Assellata de	Baddan Tallata Watash ta Whaal Chair
14.	Visitor's Facilities Available in	Parking, Toilets, Water huts, Wheel Chair,
	Zoo	Canteen / Cafeteria, Battery Operated
		Passenger Trollies(BOPT) for zoo round.
15.	Weekly Closure Day of the Zoo	Monday
Manage	ment Personnel of the Zoo	
16.	Name with designation of the	Dr. Rajesh A. Patel
	Officer incharge	I/C.Zoo Superintendent
	Name of the Veterinary Officer	Dr. Rajesh A. Patel
		Assistant Vet. Officer
	Name of the Curator	(Vacant)
	Name of the Biologist	(Vacant)
	Name of the Education officer	Instead of the Education Officer there is a two
		post of Zoo Guide in the zoo
		1. Shri Hina C. Patel
		2. Vacant
Owner ,	Operator of the Zoo	
17.	Name of the Operator	Municipal Commissioner
		(Surat Municipal Corporation)
18.	Address of the Operator	Gordhandas Chokhawala Marg,
		Mugalisara, Surat-395003
19.	Contact details / Phone number	0261- 2422244 (D), 0261-2423750 to 2423756
	of Operator	& 0261-2422285 to 2422287
20.	E-mail address of Operator	commissioner@suratmunicipal.org
		commissioner@suratmunicipal.gov.in
21.	Address of the Zoo	Dr.Shyamaprasad Mukherjee Zoological
		Garden,Opposite old Sarthana Octroi Naka,
		Surat – Kamrej Road, Sarthana Surat-395006
		Phone: +91 6359905032
		+91 6359905033

SALIENT FEATURES OF SARTHANA ZOO, SURAT

Area	Dr.Shyamaprasad Mukhrjee Zoological		32.78 hacter	
		Garden	(81 acre)	
Captive animals as on	Mammals	21	116	
31.03.2022	Birds	22	226	
	Reptiles	06	48	
	Total	49	390	
No. of animal House	Nos. 390 (covered - 229, Open moated -161)			
Zoo holiday	Every Monday, and on the eve of Dhuleti, Muharram and Anant chaudash			
Zoo timing	for visitors	10.00 am. to 5.00 pm.		
Animal feeding time	Carnivores	11.00am. to 1.00 pm.	(Except Monday)	
	Reptile	11.00am. to 1.00 pm.		
	Birds	11.00am. to 1.00 pm.		
	Herbivores	11.00am. to 1.00 pm.	& 4.00 pm. to5.00 pm.	

VISITORS' AMENITIES

- Drinking water kiosks with water cooler and R.O.system
- Toilets block at four different convenient locations
- Special toilets, wheel chairs and ramps for Handicapped and physically disable persons
- Rest areas, sit-outs / visitors sheds at various location
- Restaurant and snacks bar
- Cloak room near the entrance gate
- First aid (at zoo hospital and main gate entrance)
- Guide maps, informative and directional signage.

SPECIAL ATTRACTION OF SARTHANA ZOOS

Butterfly garden and insect kingdom

Wildlife interpretation centre with nocturnal house Light and Sound show.

Digitalized payment and issuing facility for entry ticket and facilities of online ticket booking.

OTHER SERVICES OF THE ZOO

- 1. Interactive education and awareness program.
- 2. Conduct guided tour for school children.
- 3. Availability of zoo guided tour on demand of visitors / School child visiting in group.

GENERAL INFORMATION FOR VISITORS

Entry Hours: 10.00 A.M. (Morning) to 5.00 P.M. (Evening)

Zoo remain closed on every Monday

Entry Charges (Per Head)

Entry Fee

<u>Ent</u>	ry Charges (Per Head) Entr	<u>ry Fee</u>				
1.	An Individual above 12 years of age	₹ 30.00				
2.	Children age 5 to 12 years and senior citizens age 65 years and above.	₹ 20.00				
3.	Children below 5 years	Free				
4.	Visiting students of Education institutes (Primary to Secondary Schools) & seniour citizen	₹ 10.00				
5.	School & Institutes related with WWF or nature group activities and for the college students doing research on wild life and jungles.	₹ 10.00				
6.	For the persons from Women protection centre, Orphanages, Institutions fir disabled & mentally retarded and juvenile homes.	Free				
7.	Foreigners.	₹ _ 200.00				
8.	Foreigner's children (age 3 to 12 Years)	₹ 100.00				
Pho	otography charges :					
1.	Still Camera (Per day)	₹ 50.00				
2.	Personal domestic video camera(Per day)	₹ 150.00				
3.	Professional camera/video (Per day) [Prior approval of competent authority is required, for shooting the wildlife and natural view in the premises of the Nature Park.	₹_5000.00				
	BUTTERFLY GARDEN, INSECT KINGDOM AND WILDLIFE INTERPRETATION CENTER					
	General Information :					
	ting Hour's : 10.00 A.M to 5.00 P.M.					

Butterfly Garden remains closed on every Monday.

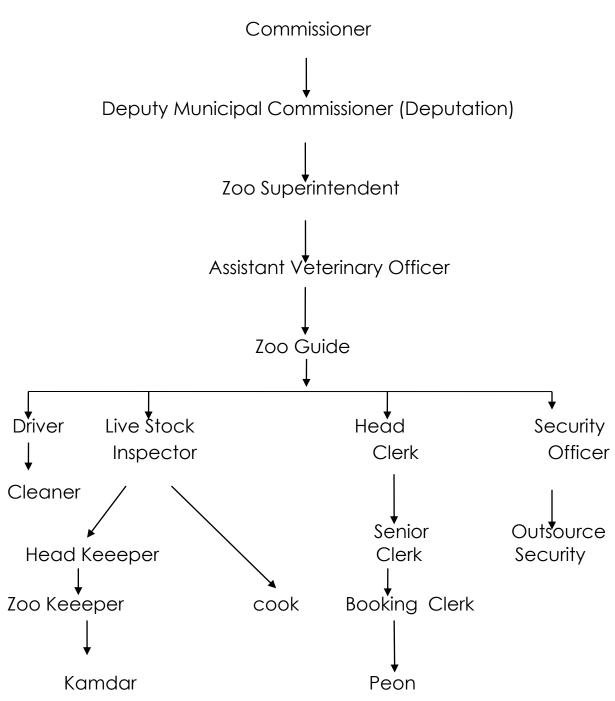
Entry Charges (per Head)

1.	Adult	₹ 20.00
2.	Children (age 5 to 12 years)	₹ 10.00
3.	Children Below 5 years.	Free
4.	Person from Women protection centre, Orphanages, Institution for	Free
	disabled & mentally retarded and juvenile homes.	
	Best time to watch Butterfly from 10.00 A.M to 3.00 P.M	

7. Organization Chart

Surat Municipal Corporation

Dr.Shyamaprasad Mukherjee Zoologica Garden



8. Human Resources

Sr.	Designation	Number Of	Names of the incumbent
No.	7	Sanctioned Posts	D. Bairah A Batal
1	Zoo Superintendent	01	Dr. Rajesh A. Patel
2	Assistant Veterinary Officer	01	Dr. Rajesh A. Patel
3	First Grade Clerk	01	vacant
4	Security Officer	01	Vacant
5	Curator (Educator & Research)/Biologist	01	Vacant
6	Zoo Guide	02	Smt. Hina C. Patel + 01 Vacant
7	Second Grade Clerk	01	Aljibhai Khakhadia
8	Laboratory Technician	01	Vacant
9	Live Stock Inspector	01+01(on loan)	Pritesh Navinlal Patel
			Ravindra R.Darbar (on loan)
10	Head Zoo Keeper	01	Mahendra R. Valhe
11	Third Grade Clerk	03	Pratik Y.Tailor
			Dhaval N.Chanakya
			Vipul A.Patel
12	Horticulture Assistant	01	Tejas S. Patel
13	Driver	01	Shailesh Surti
14	Mukadam	01	Vacant
15	Zoo Keeper	15	9 Filled up and 06
			post are vacant, which will be
			filled up as per the requirement of
			department.
16	Peon	03	Rasul Ibrahim Mirza
			Chirag D. Patel
			Subhash V. Chauhan
17	Beldar	21	All are filled
18	Zoo Sevak	01	Vacant
19	Cook	01	Balvant M. Parmar
20	Cleaner	01	Sunil I. Solanki
21	Safai kamdar	02	Hiren D.Solanki
			Rahul K Makwana

9. Capacity Building of Zoo personnel

Sr.	Name and	Subject matter of Training	Period of	Name of the	
No.	designation of the		Training	Institution	
	zoo personnel			where the	
	-			Training	
				attended	
NIL					

10. Zoo AdvisoryCommittee

a. Date of Constitution: Not in existence

b. Member : Not applicable

c. Date on which Meeting held during the year: NA

11. Health advisary Committee

a. Date of Constitution : 22 / 03 / 2004

b. Member: 3

c. Date on which Meeting held during the year: Visit/Meeting not held since last 10 years

12. Statement of income and expenditure of the Zoo

Income of Zoo during the 2021-2022

Sr.No.	Perticulars	Income (Rs.)
1	Zoo entry fees	5330380.00
2	Butterfly park entry fees	230000.00
3	Canteen / cafeteria rent	0.00
4	Mango tree auction income	258334
5	Income from parking contract	0.00
6	Tender fees / Other miscellanies income	457000.00
7	Battery operated passenger vehicle income	0.00
	Total Income	6275714.00

Expenditure of Zoo during the 2021-2022

Sr.	Particulars	Amount
No.		
1	Zoo staff Salary	21015712.40
2	Feed cost of animals	7517558.00
3	Medicine cost	87848.00
4	Security	4413600.00
5	Electricity	130000.00
6	Miscellaneous	419250.00
7	Garden and butterfly park maintenance	1215691.00
	Total Expenditure	35969659.40

13. Daily diet schedule chart of animals

Sr.	Species	feed item	Quan	itity	Day of
No			Winter	Summer	Fasting
1	Antelope Four horned	Green fodder + Concentrate	1.5Kg + 50gm	1.5Kg + 50gm	Nil
2	Antelope Black buck	Green fodder + Concentrate	2.0 Kg + 100 gm	2.0 Kg + 100 gm	Nil
3	Antelope Black buck (White)	Green fodder + Concentrate	2.0 Kg + 100 gm	2.0 Kg + 100 gm	Nil
4	Barking deer	Green fodder + Concentrate	2.5 Kg + 100 gm	2.5 Kg + 100 gm	Nil
5	Sloth Bear	Milk + Rice +Boiled Egg + Seasonal Green vegetable & fruits + Roti + Honey	1.5lit+400gm+1 +3.0 kg+1+ 50gm	1.5lit+300gm +1+2.0 kg+1+ 50gm	Monday for milk and Rice
6	Himalayan Black Bear	Milk + Rice +Boiled Egg + Seasonal Green vegetable & fruits + Roti + Honey	1.5lit+500gm+2 +4.0 kg+1+ 75gm	1.5lit+400gm +2+3.0 kg+1+ 75gm	Monday for milk and Rice
7	Jackal	Beef	1.0 kg	750 gm	Monday
8	Hanuman langur	Sprouted legume grains+Seasonal Green vegetable & fruits	1.0 kg	1.0 kg	Nil
9	Monkey Rhesus	Sprouted legume grains+ Seasonal Green vegetable & fruits	500 gm	500 gm	Nil
10	Panther	Beef	3.5 kg	3.0 kg	Monday
11	Asiatic lion	Beef	10 kg.	8.0 kg.	Monday

43	Davassalaa	Canantadlasunas	4.01	1.01	NI:I
12	Porcupine	Sprouted legume	1.0 kg.	1.0 kg	Nil
		grains +seasonal green vegetable and			
		fruits			
13	Tiger / White	Beef	10 kg	8 kg	Monday
13	Tiger	beer	I TO Ng	o kg	ivioriday
14	Otter	Fish	1.5 kg	1.4 kg	Nil
15	Mouse Deer	Green fodder+Green	250 gm	200 gm	Nil
		leafy vegetables			
		+Seasonal fruits			
16	Crocodile	Beef	1 kg / week	1.5 kg / week	
	Marsh				
17	Crocodile	Beef	1 kg / week	1.5 kg / week	
	Siamese				
18	Crocodile	Beef	0.750 kg /week	1 kg / week	
	Caiman				
19	Tortoise	Mix Green	100gm	100 gm	Nil
		Vegetable+Sproutd			
		Leguminous grains			
20	Charial	Roots	2.5.1.5./	2.5.1.5./	
20	Gharial	fish	2.5 kg / week	2.5 kg / week	
21	Indian Rock	Rabbit / Gunea pig	3.0 kg monthly	3.0 kg fort	
21	python	Nabbit / Guilea pig	3.0 kg monthly	nightly	
22	Crane Saras	Boiled Rice + fish +	100 gm +	100 gm +	Nil
		Cereals grains	500gm	500gm	
23	White Peafowl	Grains +Gramms+	200 gm	200 gm	Nil
		Green Leafy			
		Vegetable+Cabbage			
24	Indian Peafowl	Grains	200 gm	200 gm	Nil
		+Gramms+green palak			
		+cabbage			
25	Night heron	Small Fish	150 gm	150 gm	Nil
26	Spoon bill	Small Fish	150 gm	150 gm	Nil
27	White ibis	Small Fish	150 gm	150 gm	Nil
28	Black kite	Beef (Minced)	50 gm	50gm	Nil
29	Alexandrine	Seasonal fruits + milk	50 gm + 25 gm	50 gm + 25	Nil
20	parakeet	+ bread	F 10 cm	gm	NI:I
30	Cockatiel	maize + grains	5-10 gm	5-10 gm	Nil
31	Cockatoo	seasonal fruits + milk	100 gm + 50 gm	100 gm + 50	Nil
	(Umbrella)	+ bread + sunflower seed		gm	
32	Cockatoo	seasonal fruits + milk	100 gm + 50 gm	100 gm + 50	Nil
32	(Sulphar)	+ bread + sunflower	100 giii + 30 giii	gm	INII
	(Saiphai)	seed		8'''	
33	Emu	poultry layer mash	600 gm	600 gm	Nil
34	Flamingo	small fish	500 gm	500 gm	Nil
	U -	<u> </u>			1

35	Lorrikeet	seasonal fruits + milk	50 gm + 25 gm	50 gm + 25	Nil
	Rainbow	+ bread	20 8 20 8	gm	
36	Lorrikeet Red	seasonal fruits + milk	50 gm + 25 gm	50 gm + 25	Nil
	201111100011100	+ bread	30 8 123 8	gm	
37	Lorrikeet	seasonal fruits + milk	50 gm + 25 gm	50 gm + 25	Nil
	Chetering	+ bread	30 8111 - 23 8111	gm	
38	Parrakeet	seasonal fruits + milk	100 gm + 50 gm	100 gm + 50	Nil
	African Grey	+ bread + sunflower	200 8.11 30 8.11	gm	
	· ······ · · · · · · · · · · · · · · ·	seed		8	
39	Pelican Rosey	Fish	1.5 kg	1.5 kg	Nil
40	Silver Phesant	grains + layer mash +	25 gm +5gm +	25 gm + 25gm	Nil
		milk + bread	25 gm	+ 25 gm	
41	Conure	seasonal fruits + milk	50 gm + 25 gm	50 gm + 25	Nil
		+ bread		gm	
42	Golden	grains + layer mash +	25 gm +5gm +	25 gm + 25gm	Nil
	Phesant	milk + bread	25 gm	+ 25 gm	
43	Ostrich	layermash+green	2.0-2.5 kg	2.0 -2.5kg	Nil
		fodder +lucern			
44	Deer Hog	Green Grass	2.5 Kg + 100 gm	2.5 Kg + 100	Nil
		+ Concentrate		gm	
45	Deer Samber	Green Grass	10 Kg + 300 gm	10 Kg + 300	Nil
		+ Concentrate		gm	
46	Deer Spotted	Green Grass	2.5 Kg + 100 gm	2.5 Kg + 100	Nil
		+ Concentrate		gm	
47	Hynae	Beef	2.0 kg	2.0 kg	Monday
48	Hippopotamus	Green	45kg+2.0kg+3.0	45kg+2.0kg+3	
		fodder+Concentrate +	kg+2.0kg	.0kg+2.0kg	
		potato + banana			
49	Nilgai	Green Grass	8 Kg + 200 gm	8 Kg + 200 gm	Nil
		+ Concentrate			

14. Vaccination Schedule of animals

Sr. No.	Species	Disease vaccinated for	Name of the Vaccine and dosage / Quantity used	periodicity	Remarks
1	Tiger	Canine	Canigen-	Yearly	
	Leopard	leptospira,Parvo,Para	DHHPPi-		
	(felines)	influenza,	Lepto 1 dose		
		Rabies	Nobivac-R	Yearly	
			1 dose		
		Panleukopenia virus, Calci	Biofel-PCHR	Yearly	
		virus, Herpes virus, Rabies	1 dose		
2	Bears (Sloth	Canine	Canigen-	Yearly	

	bear &	leptospira,Parvo,Para	DHHPPi-		
	Himalayan	influenza,	Lepto 1 dose		
	Black bear)	Rabies	Nobivac-R	Yearly	
			1 dose		
3	Hyena, Jackle	Canine	Canigen-	Yearly	
	(Canine)	leptospira,Parvo,Para	DHHPPi-		
		influenza,	Lepto 1 dose		
		Rabies	Nobivac-R	Yearly	
			1 dose		

15. Deworming Schedule of animals

Sr. No.	Species	Drugs used	Months
1	Felines	Albendazole	June-2021
	(tiger, Leopard)	Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022
2	Canines (Hyena, Jackal, Otter,)	Albendazole	June-2021
		Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022
3	Omnivorous (Bears)	Albendazole	June-2021
		Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022
4	Herbivorous(All Deers)	Albendazole	June-2021
		Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022
5	Hippopotamus,	Albendazole	June-2021
		Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022
6	Birds (All Parakeet,lorrikeet,water	Albendazole	June-2021
	birds,Peafowl,Phesants, pelican, etc.)	Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022
7	Reptiles (python)	Albendazole	June-2021
		Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022
8	Monkey	Albendazole	June-2021
		Ivermectin	September-2021
		Fenbandazole	January-2022
		Albendazole	March-2022

16. Disinfection Schedule

Sr. No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1	Felines (tiger, Leopard)	Open moated	Kohrsoline-Th / Chlorine dioxide	every fortnightly in night shelter
2	Canines (Hyena, Jackal, Otter,)	Open moated	Kohrsoline-Th / Chlorine dioxide	every fortnightly in night shelter
3	Omnivorous (Bears)	Open moated	Kohrsoline-Th / Chlorine dioxide	every fortnightly in night shelter
4	Herbivorous(All deers)	Open moated	Quick lime dust and sometime NaOH solution spray	one in three months or as an when needed
5	Hippopotamus,	Open moated	Calcium Hypochloride powder	every 15-21 days
6	Birds (All Parakeet, lorikeet, water birds, Peafowl, Pheasants, pelican, etc.)	Cage type	Kohrsoline-Th / Chlorine dioxide	every fortnightly
7	Reptiles (python)	Cage type	Kohrsoline-Th	every fortnightly
8	Monkey	Open moated	Kohrsoline-Th / Chlorine dioxide	every fortnightly

We have started disinfecting the Vegetable and Non Vegetable food (chicken, beef, and fish) offered to All Zoo animals by washing and dipping in chlorine dioxide solution.

17. Health Check-up of Employees for Zoonotic disease.

Sr.	Name	Designation	Date of	Finding of Health
No.			Health	Check up
1		I/C Zoo	Check up	Negative for T.B.
_	Rajeshkumar A. Patel	Superitendent &	22/08/2021	vaccinated for
	Rajesiikainai 7 ratei	Assist.Vet.Officer	22,00,2021	Rabies
2	Hinaben Chirag Patel	Zoo Guide	22/08/2021	п
3	Priteshkumar Navinlal Patel	Livestock Inspector	27/08/2021	п
4	Ravindrasinh R. Darbar	Livestock Inspector	27/08/2021	п
5	Tejas s.Patel	Horticulture Assistant	22/08/2021	п
6	Mahendra Ratilal Valhe	Zoo Keeper	27/08/2021	II .
7	Sureshbhai Sravanbhai Vasava	Zoo Keeper	22/08/2021	п
8	Sureshchandra Chhotulal Patel	Zoo Keeper	22/08/2021	п
9	Manohar K.Desale	Zoo Keeper	22/08/2021	П
10	Pavan R.Patil	Zoo Keeper	22/08/2021	II .
11	Chetan S.Patil	Zoo Keeper	22/08/2021	11
12	Girish J.Chaudhary	Zoo Keeper	22/08/2021	II .
13	Jayesh M.Mahajan,	Zoo Keeper	22/08/2021	II .
14	Akash V.Parmar	Zoo Keeper	22/08/2021	11
15	Balvantbhai M. Parmar	Cook	27/08/2021	"
16	Somabhai M. Baraiya	Beldar	22/08/2021	"
17	Shankarbhai Chandulal Randeri	Beldar	22/08/2021	П
18	Kasubhai Maknabhai Damor	Beldar	22/08/2021	II .
19	Vijya Kanji Jethva	Beldar	22/08/2021	II
20	Mohanbhai K Charaniya	Beldar	22/08/2021	"
21	Atulbhai Dineshbahi Gamit	Beldar	22/08/2021	11
22	Mayur Prakashbhai Patel	Beldar	22/08/2021	"
23	Rakeshbahi Hasmukhbhai Gamit	Beldar	22/08/2021	П
24	Ganeshbhai Dilipbhai Deshmukh	Beldar	22/08/2021	п
25	Mukeshbahi Naranbhai Parmar	Beldar	27/08/2021	п
26	SunilKumar Kashinathbahi Mali	Beldar	27/08/2021	п
27	Jitesh Lalji Parmar	Beldar	27/08/2021	П
28	Bhikhabhai Jerambhai Vaghela	Beldar	22/08/2021	II.
29	Kanubahi N. Panada	Beldar	22/08/2021	11

30	Dilipkumar Kukabahi Damor	Beldar	27/08/2021	"
31	Hiren D. Solanki	Safai kamdar	22/08/2021	II
32	Rahul Makwana	Safai kamdar	22/08/2021	ш
33	Shailesh M.Surti	Driver	22/08/2021	Ш
34	Sunil I. Solanki	Cleaner	27/08/2021	Ш
35	Vinodbhai R. Patel	Trainee Beldar	22/08/2021	11
36	Moh. Hussain G. Chuahan	Trainee Beldar	22/08/2021	Ш
37	Drinkal H. Patel	Trainee Beldar	27/08/2021	Ш
38	Gayatriben G. Rathod	Trainee Beldar	27/08/2021	Ш
39	Hiren M. Patel	Trainee Beldar	27/08/2021	Ш
40	Ajay R. Patel	Trainee Beldar	27/08/2021	

18. Development works carried out in the Zoo during the year

- Visitors walkway and zoo roads repaired.
- Refurbishing of public toilets.
- > construction and repair of go down and store facilities.
- Construction of new modern Toilet Block at the main Entrance
- Construction of Off exhibit otter breeding cum Quarantine facilities.
- Painting of animal enclosure and fences.
- Construction of shed in openyard of deer enclosure.

19. Education and Awareness programme during the year

It has been mentioned in report of the director.

20. Important Events and happenings

- Celebration of World Environment day.
- > Tiger day
- ➤ Wildlife Week celebration during the 2nd October to 08th October.
- World Environment day Tree plantation programme in Zoo Premises in the presence.
- World Tiger day.

21. Seasonal special arrangement for upkeep of animals

➤ SUMMER MANAGEMENT usually the animals are under severe stress during summer. In order to improve the comfort level, heat relief measures were undertaken during last summer. • All deer enclosures were provided with new resting sheds. • Sprinkling/ fogger of water/cooler were arranged in enclosures

housing tiger, leopard, Himalayan bear, ostrich & aviary section • Special dietary arrangements were made for primates, bears, and birds to keep them at ease. • Shade nets cutting off sunlight are provided at aviaries, ostrich and white tiger enclosures.

- During winter, electric heater has been installed in tiger, leopard, Hyena, Himalayan bear and lamps are provided in each cages of the bird aviary.
- During monsoon, night shelter entry kept open throughout the day, so animal may go to the shaded area to protect itself from heavy rain.
- **22. Research Work carried out and publications:** During this year Surat zoo has neither undertaken any research work nor any publications have been carried out.

23. Conservation Breeding programme of the Zoo

> Zoo has successfully breed Mouse deer, Black buck, smooth coated Indian otter, Hippopotamus and other animals in the captivity.

24. Animal acquisition / transfer / exchange during the year

Α.		Anima	ls arriving	in the Zoo	
	H. No.	species	Number (M:F)	From which Zoo	Date of arrival in the Zoo
	1	Tiger (Leucistic)	1:1	Pradhyuman zoological park , Rajkot	03/07/2021
	2	Jackal	1:1	Pradhyuman zoological park , Rajkot	03/07/2021
	3	Silver Pheasant	1:1	Pradhyuman zoological park , Rajkot	03/07/2021
	4	Hog Deer	2:2	Pradhyuman zoological park , Rajkot	12/10/2021
В.		Anima	ls going fro	m the Zoo	
	H. No.	species	Number	To which Zoo	Date of
			(M:F)		disposal
					from the
					Zoo
	1	Smooth Coated otter	1:1	Pradhyuman zoological park , Rajkot	03/07/2021
	2	Peafowl (Leucistic)	1:1	Pradhyuman zoological park , Rajkot	12/10/2021
	3	Spoon Bill	1:1	Pradhyuman	12/10/2021

			zoological park , Rajkot	
4	Leopard	1:1	Pradhyuman zoological park , Rajkot	03/07/2021

25. Rescue and Rehabilitation of wild animals carried out by the Zoo: Nil

Sr. No.	Date of Rescue	Species with number of animals rescued with their sex (M:F:U:T)	Received from	Date of Submission of Report to the CWLW / CZA	Action	Taken
					Date and Place of rehabilitation in their habitat	Reasons for housing in the Zoo if not released in their habitat
		NIL				

26. Annual Inventory of animals

Form-II [See Rule 11(1)] Part-A

Inventory Report for the Year:2020-2021

Endangered Species

SR.	Animal Name	Scientific Name	Ор	Opening Stock			During the year												Closing Stock			
NO.			as	as on 01-04-2021		В	Birth		Aquistion		Disposal			De	eath		as 202	6-				
			M	F	U	Т	М	F	U	М	F	U	M	F	U	М	F	U	М	F	U	Т
AVE	S :-																					
1	White peafowl	Pavo crestatus	3	7	0	10	0	0	0	0	0	0	1	1	0	0	0	0	2	6	0	8
2	Indian peafowl	Pavo crestatus	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6
3	Spoon Bill	Platalea leucordia	2	2	4	8	0	0	0	0	0	0	1	1	0	0	0	1	1	1	3	5
	TOTAL AVES :		8	12	4	24	0	0	0	0	0	0	2	2	0	0	0	1	6	10	3	19

SR.	Animal Name	Scientific Name	Оре	ening	g St	ock				T	Dι	uring	the ye	ear		Closing Stock						
NO.			as	as on 01-04-2021		В	Birth		Aquistion		Disposal			De	eath			as on 30 - 06- 2021				
			M	F	U	Т	М	F	U	M	F	U	М	F	U	M	F	U	M	F	U	Т
MAN	IMALIA :-																					
	Black buck(leucistic/					_																
1	white)	Antelop cervicapra	0	2	1	3	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	2
2	Black buck	Antelop cervicapra	3	9	9	21	0	0	0	0	0	0	0	0	0	1	2	0	2	7	9	18
3	Indian jackal	Canis aureus indicus	4	7	0	11	0	0	0	1	1	0	0	0	0	2	0	0	3	8	0	11
4	Smooth coated Otter	Lutrogale perspicillata	9	6	0	15	0	0	4	0	0	0	1	1	0	0	0	0	8	5	4	17
5	Rhesus Macaque	Macaca mulatta	6	7	2	15	0	0	1	0	0	0	0	0	0	0	0	0	6	7	3	16
6	Bear sloth	Melursus urisinus	2	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	5
7	Mouse deer	Moschiola indica	1	3	0	4	0	0	1	0	0	0	0	0	0	0	0	0	1	3	1	5
8	Asiatic Lion	Panthera leo persica	1	1	0	2	3	1	0	0	0	0	0	0	0	2	1	0	2	1	0	3
9	Leopard	Panthera parduas	3	2	0	5	0	0	0	0	0	0	1	1	0	0	0	0	2	1	0	3
10	White Tiger	Panthera tigris tigris	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	2
11	Bengal Tiger	Panthera tigris tigris	1	1	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1
12	Antelop four horned	Tetracerus quadricornis	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
13	Himalayan Black Bear	Ursus thibetanus	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
	Total Mammalia		33	43	12	88	3	1	6	2	2	0	2	2	0	5	5	0	32	39	17	88
REP	TILIA :-				I					I											<u> </u>	
1	Crocodile Marsh	Crocodylus palustris	1	1	14	16	0	0	0	0	0	0	0	0	0	0	0	0	1	1	14	16
2	Gharial	Gavialis gangaticus	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
3	Indian rock phython	Python molurus	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Total Reptila		1	2	15	18	0	0	0	0	0	0	0	0	0	0	0	0	1	2	15	18
	Total Animals.		42	57	31	130	3	1	6	2	2	0	4	4	0	5	5	1	39	51	35	125

SR.	Animal Name	Scientific Name	Opening Stock	During the year	Closing Stock

NO.			as	on 0	1-04-2	021	Bir	th		Aqu	iistio	n	Dispe	osa		Dea	ath		as 202	_	30 - 06	j –
			M	F	U	Т	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
AVES:																						
1	Sarus Crane	Antigone antigone	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
2	Umbrella Cockatoo	Cacatua alba	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1
3	Sulphur Crested Cockatoo	Cacatua galrita	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4	Golden phesant	Chrysolophus pictus	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5	Silver phesant	Lophura nycthemera	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	2
6	Emu	Dromaius novaehalladiae	2	0	8	10	0	0	0	0	0	0	0	0	0	0	0	0	2	0	8	10
7	Moluccan Red Lory	Eos squamata	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8	Chattering Lory	Lorius garrulus	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
9	Black kite	Milvus migrans	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
10	Painted stork	Mycteria leucocephala	2	2	4	8	0	0	2	0	0	0	0	0	0	0	0	0	2	2	6	10
11	Black Crowned Night Heron	Nycticorax nycticorax	2	2	4	8	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	8
12	Cockatiel	Nymphicus hollandicus	0	0	126	126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126	126
13	Great White Pelican	Pelecanus oncrotalus	3	3	0	6	0	0	0	0	0	0	0	0	0	0	1	0	3	2	0	5
14	Alexandrine perakeet	psittacula eupatria	7	6	4	17	0	0	0	0	0	0	0	0	0	0	0	0	7	6	4	17
15	Grey Parrot Jacquot	Pisttocus erithacas	2	2	0	4	0	0	0	0	1	0	0	0	0	0	1	0	2	2	0	4
16	Common Ostrich	Struthio camelus	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
17	Black Headed Ibis	Threskiornis melanocephalus	1	2	4	7	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	7
18	Rainbow Lorikeet	Trichoglossus moluccanus	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
19	Green Cheeked Conure	Pyrrhura moline	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2
	Total Aves		26	2 0	157	203	0	0	2	1	2	0	0	0	0	0	2	1	2 9	2 0	158	207

SR.	Animal Name	Scientific Name	Opening Stock			ck					Dι	ıring	the ye	ear					CI	losing	Sto	ck
NO.			as o	n 01-	04-2	021	Birth			Aquistion			Disposal			Death			as on 30 - 06- 2021			, =
			М	F	U	Т	M	F	U	М	F	U	М	F	U	М	F	U	М	F	U	Т
MAMMALS :-																						
1	Spotted Deer	Axis axis	4	10	1	15	0	0	1	0	0	0	0	0	0	3	8	0	1	2	2	5
2	Hog Deer	Axis porcinus	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	2	2	1	5
3	Nilgai	Boselaphus tragocamelus	1	2	0	3	0	1	0	0	0	0	0	0	0	0	1	0	1	2	0	3
4	Hippopotamus	Hippopotamus amphibius	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
5	Striped Hynae	Hyaena hyaena	3	3	0	6	0	0	0	0	0	0	0	0	0	1	1	0	2	2	0	4
6	Indian crestd Porcupine	Hystrix indica	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
7	Indian Muntjac	Muntiacus muntjak	1	1	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1
8	Samber Deer	Rusa unicolor	2	4	0	6	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	5
	Total Mammals :-		13	22	2	37	0	1	2	2	2	0	0	0	0	6	10	0	9	15	4	28

SR.	Animal Name	Scientific Name	Оре	ening	Stoc	k					D	urin	g the	year					Clo	osing	Stock	•
NO.			as c	on 01-	-04-20	21	Bi	rth		Aqı	uistio	n	Disp	osal		De	eath		as c	n 30	- 06- 2	2021
			M	F	U	Т	M	F	כ	M	F	U	M	F	U	M	F	U	М	F	U	Т
REPTILIA:-																						
1	Spectacled Caiman	Caiman crocodilus	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
2	Siemese Crocodile	Crocodylus siamensis	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
3	Indian StarTortoise	Geochelone elegans	11	16	0	27	0	0	0	0	0	0	0	0	0	0	0	0	11	16	0	27
	Total Reptilia :-		11	16	3	30	0	0	0	0	0	0	0	0	0	0	0	0	11	16	3	30
	Total Animals :-		50	58	162	270	0	1	4	3	4	0	0	0	0	6	12	1	49	51	165	265
	GRAND TOTAL		92	115	193	400	3	2	10	5	6	0	4	4	0	11	17	2	88	102	200	390

27. Mortality of animals

Sr.No.	Animal Name	Scientific Name	Sex	Date	Cause of death as diagnosed through postmortem
	Mammal				
1	Antelope Black buck	Antelop cervicapra	М	08/04/2021	Acute Infection
2	Deer Spotted	Axis axis	F	13/04/2021	Old age / Senility
3	Asiatic Lion	Panthera leo	М	13/04/2021	Leak of Mother care
4	Asiatic Lion	Panthera leo	F	15/04/2021	Still birth of cub (Delievered dead)
5	Asiatic Lion	Panthera leo	М	16/04/2021	Still birth of cub (Delievered dead)
6	Tiger	Panthera tigris	F	09/06/2021	Haemorrhagic
7	Deer Spotted	Axis axis	F	06/07/2021	Chronic respiratory disease
8	Deer Spotted	Axis axis	М	10/07/2021	Chronic malignancy disease
9	Deer Spotted	Axis axis	М	20/07/2021	Sanility
10	Jackal	Canis aureus	М	21/07/2021	Acute Infection
11	Deer Spotted	Axis axis	F	25/08/2021	Sanility
12	Nilgai	Boselaphus tragocamelus	F	28/08/2021	Sanility
13	Deer Spotted	Axis axis	F	03/09/2021	Sanility & Chronic debility
14	Barking deer	Antelop cervicapra	М	09/09/2021	Sanility
15	Antelope Black buck	Antelop cervicapra	F	15/09/2021	Traumatic shock
16	Antelope Black buck (White)	Antelop cervicapra	F	11/10/2021	Sanility
17	Striped Hynae	Hyaena hyaena	F	14/10/2021	Old age
18	Deer Spotted	Axis axis	F	16/10/2021	Sanility
19	Antelope Black buck	Antelop cervicapra	F	17/10/2021	Pregnency Toxaemia
20	Deer Spotted	Axis axis	F	18/10/2021	Sanility
21	Deer Spotted	Axis axis	F	20/10/2021	Sanility
22	Deer Spotted	Axis axis	М	11/12/2021	Chronic respiratory disease
23	Jackal	Canis aureus	М	19/12/2021	Traumatic shock
24	Samber Deer	Rusa unicolor	M	24/12/2021	Old age
25	Striped Hynae	Hyaena hyaena	М	03/01/2022	Old age
26	Deer Spotted	Axis axis	F	10/01/2022	Sanility
	Birds				
1	Cockatoo (Umbrella crested)	Cacatua alba	F	23/05/2021	Acute Infection
2	Parakeet African Grey	Pisttocus erithacas	F	15/06/2021	Old age / Senility
3	Pelican (Rosey)	Pelecanus oncrotalus	F	30/06/2021	Old age / Senility
4	Spoon Bill	Platalea leucordia	U	12/10/2021	Traumatic shock

28. Compliance with conditions stipulated by the Central Zoo Authority

Details on compliance of the conditions stipulated by the Central Zoo Authority (as per the earlier letter of grant of recognition issued to the zoo)

Letter No. (1) File No.7-10/2020-CZA(PART-I)/I/2447/2020, dt. 25.08.2020

- (2) F. No. 19-117/93-CZA(70)(Vol.V)(PKR)/1856/2017 dt. 27.10.2017
- (3) F. No. 19-117/93-CZA(70)(Vol.V)(M)/4619/ dt. 09.04.2014
- (4)F. No. 19-117/93-CZA(70)(Vol.IV)(M)/ dt. 11.04.2011

Sr.	Norm	Condition	Time	Since when	Status with regards to compliance of the conditions
No.	No.	Stipulated	Period	pending	
	under	·	to Comply		
	RZR				
	2009				
1.General	requirements:	,			
1	1(9)	The Zoo Operator has failed to remove the domestic ducks from	With immediate	27/10/2017	Zoo is not keeping any number of domestic ducks/geese in cages/captivity. Zoo
		display, in spite of repetitive reminders from the CZA. All such	effect		official are in search of some agency, who can take them and keep them
		domestic ducks should be relocated outside the zoo premises.			upkeep in their premises/farm/resort.
2. Admini	strative and staff		1	T	
2	2(1)	The Zoo has failed to post full time officer -in-charge at the zoo.	Six months.	27/10/2017	SMC has already advertised the post of Zoo Superintendent recently in year,
		The present Officer-in-charge for food and drug licence of			2020 and the matter is in process with the competent authority.
		Municipal Corporation of Surat. Full time Officer-in-charge should			
_		be appointed.			
3	2(1)	It has been noticed during the evaluation that maintenance of	with immediate	27/10/2018	All pending work of repair and refurbishing of animal enclosures have been
		animal enclosures and other infrastructures is not being done on	effect		completed by the Engineer In-Charge and a certificate of completion has been
		regular basis. It is suggested that may have independent adequate power to take up emergency repair as and when required. The			issued by this office.
		delay in dealing with such repair works was noticed during the			
		evaluation.			
3.Develor	ement and plani				I.
4	3 (1&2)	The Zoo Operator has failed to submit the Master Plan for the	With immediate	27/10/2017	Master (Layout) Plan has already been submitted and approved by the CZA.
7	3 (102)	long term development of the zoo to Central Zoo Authority for its	effect.	27/10/2017	Management Plan submitted on dated.31/03/2021 for CZA approval.
		approval. The CZA has already granted extension of 3 months	circot.		management han submitted on duted of 2012011 for eart approval.
		times for submission of Master Plan. The same period has also			
		been lapsed, the zoo failed to submit the master Plan. Should			
		submit Master Plan to the CZA for approval.			
5	3(5)	A kiosk is being operated in unhygienic manner just after entry to	Three months	27/10/2018	SMC has already started renovation and development of entry gate in which
		the Zoo. The same should be relocated to an appropriate place and			provision had already made to shift existing kiosk/ cafeteria outside the zoo
		should be maintained hygienically and it should be ensured that no			premises. This will automatically ban entry of plastic inside the zoo premises.
		goods are sold in the plastic.			

4. Develo	pment and Plani	ning:			
6	4(3,4,&5)	The leopard enclosure should be provided 25% viewing area of the total exhibit to the visitors.	Three months	27/10/2018	Keeping in view We have plant new hedges. Once they will grow sufficiently, we will cut them in the manner, which will allow visitors to view the animal from 25% area only.
7	4(3)	All the aviaries at the zoo should have at least 10-20% area as kuccha floor with soil and live plants	Three months	27/10/2017	All the cages of the aviary have been facilitated with 20% natural bedding material (soil+sand) to provide kaccha floor to the captive birds. Live plants are already in existence.
8	4(3)	The aviaries should have elevated feeding platform for terrestrial birds.	Three months	27/10/2017	All the cages of the aviary have been facilitated with elevated platform.
9	4(9)	The stand-off barrier provided at various animals exhibits needs immediate repair.	With immediate effect	27/10/2017	All ready completed
10	4(9)	The stand-off barriers provided at the aviaries should at a distance of 150 cm from the chain link mesh	With immediate effect		Pending being this work involves total changes in positioning of railing and walkway but it will be taken to the task soon.
11	4(10)	The zoo should provide directional signage to facilitate the visitors	Three months	27/10/2017	Work of directional signage through out the zoo premises has been completed.
12	4(10)	The signage provided at the zoo does not have much educational values. All the signage's should be assessed and should be upgraded. All signage should have educational value.	Three months	27/10/2017	Educational signage with upgraded version has been fixed up at required and desired places. further timely up gradation will be carried out.
5. Upkee	p and healthcare	of animals:		1	<u> </u>
13	5(1)	The sub-adult Sloth bear at the zoo, housed in small cell for long period should be shifted to main enclosure area or it should be provided area as prescribed in the CZA norms.		27/10/2017	Already shifted to main enclosures.
14	5(2)	The zoo should have diet schedule for each animals prepared and the same should be displayed in animal kitchen area	With immediate effect	27/10/2017	Diet schedule for each animals prepared and displayed in animal kitchen and also in each animal enclosures too.
15	5(4)	The MS sheet covered shade provided to Spotted deer should be covered by coconut leaves or other such material.	With immediate effect	27/10/2017	The MS sheet covered shade provided to Spotted deer has been covered with hay/dry grass/thatch.
16	5(10)	The zoo has failed to maintain the animal history cards in the format as prescribed by the CZA. The records should the maintained.	With immediate effect	27/10/2018	The zoo is maintaining animal history card in the format as prescribed by the cza. Zoo is also maintaining Livestock Register and keeping it always updated.
6. Veteri	nary and infrastr	ucture facilities:		•	<u>'</u>
17	6(1)	Dr.Shyama Prasad Mukherjee Zoological Garden, Surat, Gujarat being classified as a medium caterory zoo, but does not have adequate veterinary facility, including the basic veterinary equipments, x-ray machine etc. Should be complied.	Three months	27/10/2017	As Surat city is well facilitated with ultra modern Nandini veterinary hospital and Navsari Veterinary College is very much nearby to Surat zoo, we are availing all these facilities from them under the guidance of subject matter specialist for accurate diagnosis and proper treatment.
18	6(3)	The Zoo does not have appropriately designs isolation and quarantine house. It should be located away from animal exhibit as well as existing veterinary hospital area.	Three months	27/10/2017	Surat zoo has constructed isolation and quarantine house/cages as per the design, drawing and location approved by the CZA and now it's not possible to redesigned and reconstructed elsewhere.
19	6(6)	The zoo should conduct mock drill and various other awareness campaigns including the training the zoo guards, keepers, and	With immediate effect	27/10/2017	Mock drill and various other awareness campaigns including the training the zoo guards, keepers, and other support staff on the issues of disaster are

		other support staff on the issues of disaster		undertaken periodically throughout the year. Arrangement had been made for potable rope stairs at Tiger, Lion and Bear open moat for emergency use.
9.Acquis	ition and breeding	g of animals:		
20	9(7)	The Zoo had been housing 105 nos. of healthy Rose ringed parakeet. the surplus population of Rose ringed parakeet should be released into the natural habitat after due screening of their health and it should be ensured that protocols laid by th CZA/IUCN in this regard are followed or the birds may be given to other recognized zoo with prior approval from CZA and CWLW of the State.	27/10/2017	These 105 nos. of healthy Rose ringed parakeet have been seized and rescued by the Forest Department and on request of them, these have been kept temporarily at the zoo (with the order of the court). If some zoo will submit a demand for them, we will spare them immediately with the permission of CZA and State Forest Department.

29. List of free living wild animals within the zoo premises

a. Mammals

No.	Name of the animal	Scientific Name
1.	Grey Mongoose	Herpestes edwardsii
2.	Small Indian Mongoose	Herpestes javanicus
3.	Ruddy Mongoose	Hepestes smithii
4.	Indian Civet	Viverricula indica
5.	Bats	Cheroptera
6.	Three Stripped Palm Squirrel	Funambulus palmarum
7.	Large Bandicoot Rat	Bandicota indica
8.	Hanuman Langur	Semnopithecus entellus
9.	Indian Hare	Lepus nigricollis

b. <u>Birds</u>

No.	Name of the bird	Scientific Name
1.	Little Cormoratnt	Phalacrocorax niger
2.	Grey Heron	Ardea cinerea
3.	Cattle Egret	Bubalcus ibis
4.	Little Egret	Egretta garzetta
5.	Black Kite	Milvus migrans govinda
6.	Shikara	Accipiter trivirangatus
7.	Indian Peafowl	Pavo cristatus
8.	White Breasted Waterhen	Amaurornis phoenicurus
9.	Rock Pigeon	Columba livia
10.	Spotted Dove	Streptopelia chinensis
11.	Rose Ringed Parakeet	Psittaculla krameri
12.	Plum Headed Parakeet	Psittaculcyano cephala
13.	Asian Koel	Eudynamys scolopacea
14.	Spotted Owlet	Athene brama
15.	House Swift	Apus affinis
16.	Pied King Fisher	Ceryle rudis
17.	Green Bee Eater	Merops orientalis
18.	Indian Roller	Coracias benghalensis
19.	Black Rumped Wood Pecker	Dinopium benghelenses
20.	Small Skylark	Alauda gulgula
21.	Jungle Myna	Acridotheres fascus
22.	House Crow	Corvus spendens
23.	Large Billed Crow	Corvus macrorhynchos
24.	Red Vented Bulbul	Pycnonotus cafer
25.	Asian Paradise Fly Catcher	Terpsiphone paradise
26.	Tailor Bird	Orthotomus sutorius
27.	Oriental Magpie Robin	Copsychus saularis
28.	White Wagtail	Motacilla alba
29.	House Sparrow	Passer domesticus
30.	Red Avadavat	Amandava amandava
31.	Black Headed Ibis	Threskiornis melanocephalus

c. Reptiles

No.	Name of the animal	Scientific Name
1.	sand Boa	Eryx conicus
2.	Viper Saw Scaled	Echis carinata
3.	Snake Rat / Dhaman	Ptyas mucosus

4.	Cobra Indian	Naja nanja
5.	Trinket snake	Coelognathus helena
6.	Green vine snake	Ahaetulla nasatu
7.	Indian wolf snake	Lycodon aulicus
8.	Bamboo pit viper	Tremeresus gramineus
9.	Checkered Keelback	Xenochrophis piscator
10.	common Krait	Bungarus caeruleus
11.	Turtle Fresh Water /Indian Soft Shelled	Presdypis entellus