



annual report
2016-17



सेल SAIL

STEEL AUTHORITY OF INDIA LIMITED
ROURKELA STEEL PLANT, ROURKELA



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From CEO's Desk

I am happy to note that the Horticulture Unit of Rourkela Steel Plant is bringing out an annual report on the Indira Gandhi Park Zoo and Deer Park for 2016-17.

Rourkela Steel City, with its verdant green canopy and gardens and parks with colourful flowers, is a visitor's paradise. The Indira Gandhi Park Zoo & Deer Park maintained by us serve to provide visitors with recreation and relaxation and they are a huge draw throughout the year. Students as also other visitors are keen followers and benefit a lot by getting knowledge and awareness of the various flora and fauna through the various zoo education programmes.

I extend my congratulations and best wishes to all who are associated with these programmes.

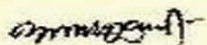
INTEGRATED MANAGEMENT SYSTEM POLICY

(Management Systems for Quality, Environment, Occupational Health & Safety and Social Accountability)

***Rourkela Steel Plant, a unit of SAIL,
is committed to :***

- provide defect free products and services to all its customers on time and every time by establishing an effective Quality Management System.
- prevent pollution and maintain a clean, green and sustainable environment in and around the steel plant as a part of its Corporate Social Responsibility.
- prevent injury and ill health by providing healthy and safe working environment for its employees and for all those working in the plant.
- provide socially accountable work culture to all its stakeholders.
- comply with applicable legal and other requirements related to Integrated Management System.
- adhere to all the requirements of internationally recognized QMS, API Q1, EMS, OHSMS & SA standards and review the objectives and targets periodically for effectiveness and continual improvement.

Date : 05.04.2016
STEEL AUTHORITY OF INDIA LIMITED
Rourkela Steel Plant


(Ashwini Kumar)
Chief Executive Officer

Mission

Develop amongst visitors' an empathy for wild animals and motivate them to support the cause of conservation of wildlife and also to provide holistic nature conservation education with wholesome recreation.

Objectives

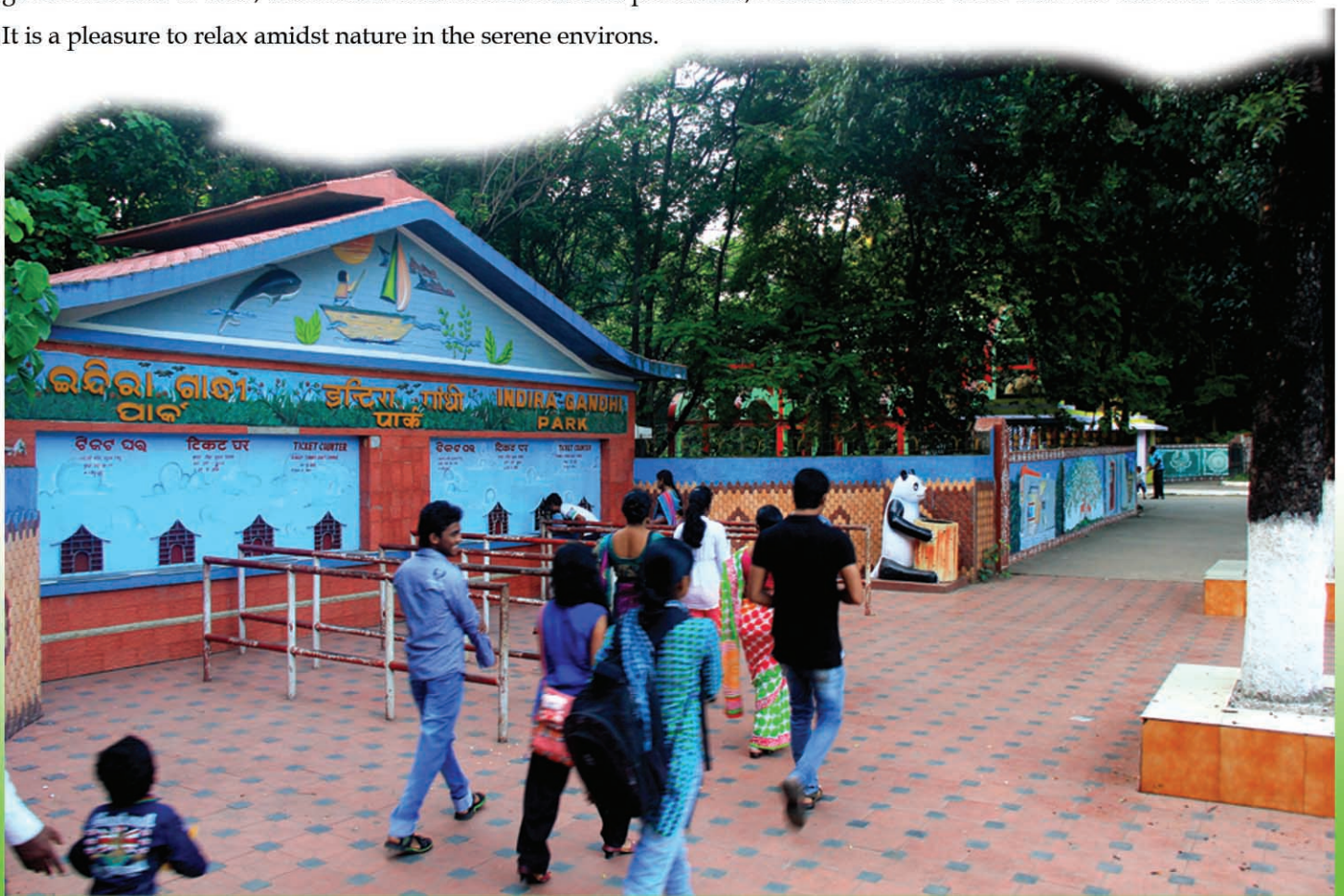
- To provide a glimpse of some of the flora and fauna of the region
- To maintain a natural ecosystem in the Steel Township
- To provide awareness on conservation and education among all

About Indira Gandhi Park Zoo

A Botanical Garden was established in the early 1960's, and a few species of birds and some spotted deer were given place there. It was subsequently christened as Indira Gandhi Park Zoo. With passage of time, new species were introduced to the collection and was given recognition by Central Zoo Authority in the year 1995.

Indira Gandhi Park Zoo is situated in the centre of Rourkela city, the industrial capital of Odisha on the Howrah Mumbai Railway line. It owes its splendor to the natural surroundings of the Chhotanagpur hill range amidst the tranquil environs and soothing natural beauty with a small lake. Indira Gandhi Park Zoo is spread over an area of 50 acres where six varieties of mammals, thirteen varieties of birds and four varieties of reptiles are housed for conservation as well as education for the visitors. Animals like the crocodile, Indian rock python, gharial, barking deer, sambar and spotted deer, four horned antelope and birds like the peafowl, white ibis, varieties of pheasants, exotic birds like love birds, budgerigar, cockatiels, blue and gold macaws, emus and ostriches are the major attractions for the visitors. An aquarium with 18 species and 860 numbers of fishes is an additional feature enriching the zoo.

The Zoo boasts of a landscape with soft green grasses, the glossy leaves of varied bushes, the lusturing canopies of a good collection of trees, the colorful beds of seasonal and perennials, beautiful roses of more than 150 different varieties. It is a pleasure to relax amidst nature in the serene environs.



Special attractions of IG Park Zoo

The Doll Museum at the IG Park is the only one in Odisha with a collection of as many as 250 dolls from across the globe. It provides glimpses of dresses, marriage styles, dances of India and has a collection of foreign dolls. It is a good educational and amusement spot for the visitors. An Aquarium with 18 species of fishes with about 800 fishes is maintained at I.G. Park to entertain the visitors visiting the zoo. Among the aquarium fishes, gold fishes, tiger barbs, tetras, gouramis, crocodile fishes, carps, Oscars, different varieties of aquarium sharks are adding value to the aquarium.

Paddle boats in a beautiful Lake are used by visitors for a pleasure ride.

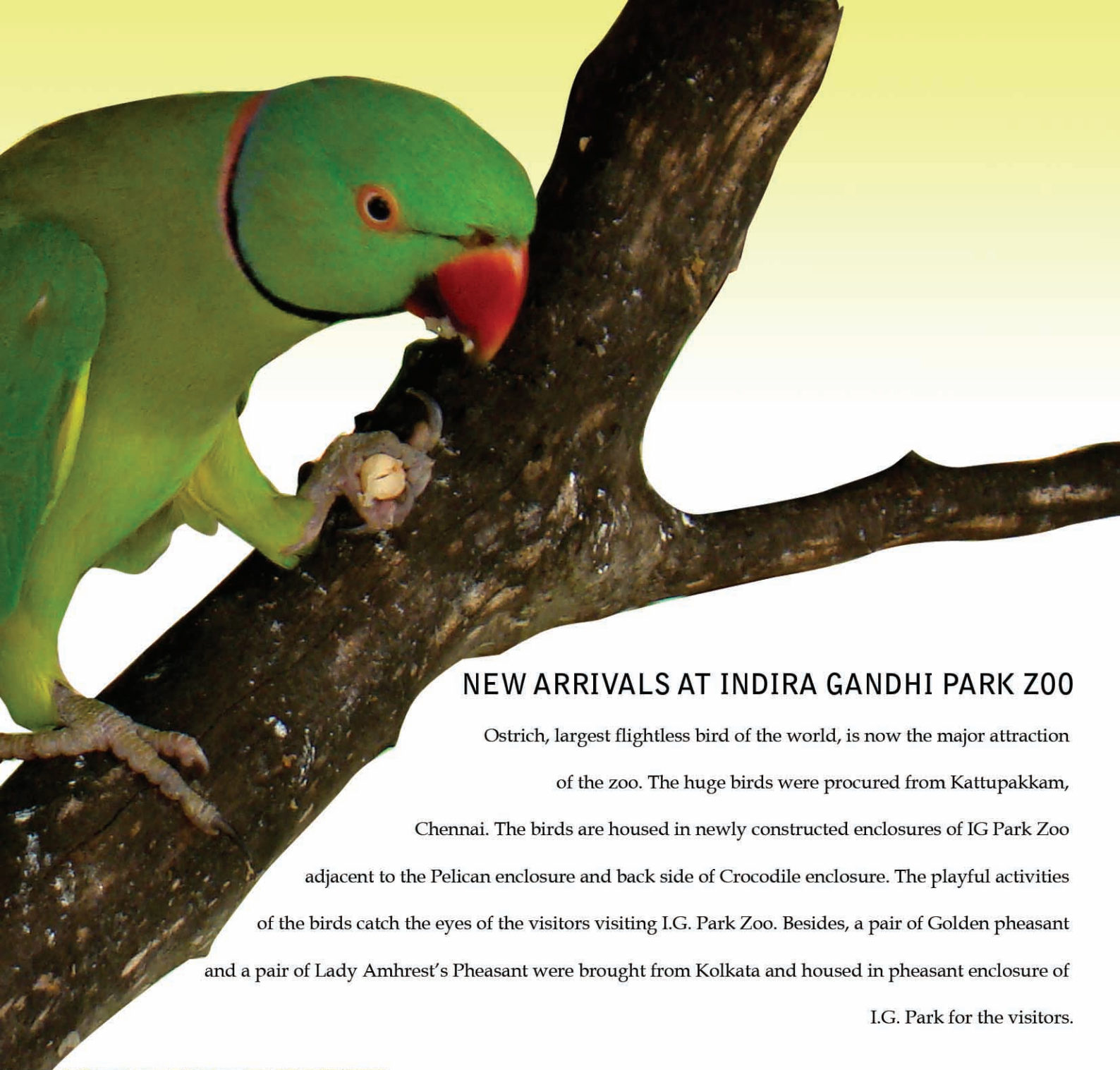
People enjoy boating along with huge carps sailing with them in their natural habitat. The Observation Tower is situated at the center of the zoo area to give the visitors a 360° view of the park at a glance. The Musical Fountain in the evening offers a breathtaking collage of music and beauty is a major attraction. Another unit of the zoo known as the Deer Park is situated 4 km away, at Sector 8 of Rourkela. It is an open free ranging habitat for the spotted deer. The simulating forest habitat in the park hosts 118 spotted deer that attracts visitors every now and then.



Zoo Inmates

S. no.	Common name	Scientific name	Stock Position As on 01.04.16				Stock Position As on 31.03.17			
			M	F	U	T	M	F	U	T
Mammals										
1	Sambar	<i>Rusa unicolor</i>	2	3	-	5	2	3	-	5
2	Spotted deer	<i>Axis axis</i>	6	14	-	20	6	14	-	20
3	Barking deer	<i>Muntiacus muntjac</i>	7	3	-	10	7	3	-	10
4	Four horned antelope	<i>Tetracerus quadricornis</i>	4	4	-	8	4	4	-	8
5	Mongoose	<i>Herpestes edwardsii</i>	3	3	-	6	3	3	-	6
Birds										
1	Peafowl	<i>Pavo cristatus</i>	3	1	-	4	3	1	-	4
2	Hill Mynah	<i>Gracula religiosa</i>	-	-	-	-	-	-	1	1
3	Rosy pelican	<i>Pelicanus roseata</i>	2	2	-	4	1	-	-	1
4	White ibis	<i>Threskiornis threskiornis</i>	2	2	-	4	1	1	-	2
5	Rose ringed parakeet	<i>Psittacula alexandria</i>	-	-	17	17	-	-	17	17
6	Alexandrine parakeet	<i>Psittacula eupatria</i>	-	-	10	10	-	-	10	10
7	Love bird	<i>Agapornis sp.</i>	-	-	6	6	-	-	6	6
8	Budgerigar	<i>Melopsittacus undulatus</i>	-	-	14	14	-	-	14	14
9	Cockatiel	<i>Nymphicus hollandicus</i>	-	-	3	3	-	-	3	3
10	Emu	<i>Dromius novaehollandiae</i>	2	2	4	8	2	2	4	8
11	Ostrich	<i>Struthio camelus</i>	2	1	-	3	1	1	-	2
12	Blue & Gold Macaw	<i>Ara aurundinacea</i>	-	1	-	1	2	2	-	4
13	Lady Amherst's Pheasant	<i>Chrysolophus amherstiae</i>	1	1	-	2	1	1	-	2
14	Golden pheasant	<i>Chrysolophus pictus</i>	1	1	-	2	-	1	-	1
Reptiles										
1	Indian rock python	<i>Python molurus</i>	2	-	1	3	2	-	2	4
2	Gharial	<i>Gavialis gangeticus</i>	1	2	-	3	1	2	-	3
3	Mugger	<i>Crocodylus palustris</i>	1	1	-	2	1	1	-	2
4	Star tortoise	<i>Geochelone elegans</i>	-	-	1	1	-	-	-	-
Deer Park										
1	Spotted deer	<i>Axix axis</i>	40	79	-	119	39	79	-	118





NEW ARRIVALS AT INDIRA GANDHI PARK ZOO

Ostrich, largest flightless bird of the world, is now the major attraction of the zoo. The huge birds were procured from Kattupakkam, Chennai. The birds are housed in newly constructed enclosures of IG Park Zoo adjacent to the Pelican enclosure and back side of Crocodile enclosure. The playful activities of the birds catch the eyes of the visitors visiting I.G. Park Zoo. Besides, a pair of Golden pheasant and a pair of Lady Amhrest's Pheasant were brought from Kolkata and housed in pheasant enclosure of I.G. Park for the visitors.



Feed and Fodder

Indira Gandhi Park Zoo is having a green fodder cultivation area near crocodile enclosure where hybrid Napier, NB-21, etc. being cultivated for feeding wild herbivores. Besides, a rate contract system is in vogue for supply of daily and monthly feeding items as per the Feeding Chart and recommendation of the veterinary officer. A total of 30 varieties including both cooked and raw feeding items are provided to the zoo inmates daily. A zoo kitchen is dedicated for preparation the cooked food for the animals.

Facilities for visitors

- First-aid
- Refreshment
- Public Convenience Complex
- Drinking Water kiosks
- Wheel Chair
- Sit outs and Rain shelters
- Children’s play zone
- Beautiful gardens



Fee structure, Visitor flow & Revenue

Entry fee (above 5 years): Rs. 10.00

Children below 5 years : Free entry

Year	Visitors' flow	Revenue collected (in Rupees)
2014-15	563893	28,19,465.00
2015-16	374473	37,44,730.00
2016-17	401511	40,15,110.00



Healthcare

Licking heals!

Animals are sometimes their own doctors. The saliva from the mouth cavity is rich in Immunoglobulin A (Ig-A) with anti-bacterial activity. A male barking deer at Indira Gandhi Park Zoo was severely injured due to infighting between males inside the enclosure. There was a deep cut wound by the antler of other male near the joint of pectoral girdle and humerus. The animal was attended immediately and decided to separate the animal from the group. The wound was so severe; it was not advisable to restrain the injured barking deer expecting more intense injury to the animal with chance of dislocation



So, it was supplemented antibiotic orally through ripe banana. The animal was separated and kept undisturbed as possible to so as to restrict its movement. Regular close observation was made through binocular to monitor any maggot invasion. It was observed that the animal is licking the wound very frequently and does not allow any insect to

Outbreak of Avian Influenza (H5N1) at Indira Gandhi Park Zoo

Brief History:

There were incidences of death of some avian fauna at Indira Gandhi Park Zoo in recent past. One Rosy Pelican died on 18.11.2016 in the pelican enclosure housing 4 nos. of adult Pelicans brought from Bhilai Zoo in 2008. There was no report of any sickness amongst the birds for last 8 years till 17.11.16. The post mortem of the said bird was performed by Veterinary Assistant Surgeon, Govt. Veterinary Hospital; Rourkela. The death of the bird may be due to hepatitis as was revealed in P-M findings. Liver extract & multi-vitamin supplementation was started in daily feed i.e. fish. After a month i.e. on 21.12.2016, another pelican died in the same enclosure without any noticeable clinical symptom. The P-M was performed by VAS, Govt. Vet. Hospital, Rourkela & Sr. Vet. Officer, I.G. Park Zoo which also revealed hepatitis. On 24.12.16, the 3rd pelican showed dullness & inability to fly along with off-fed. Immediately it was shifted to the Zoo Vet. Hospital and was provided I/v infusion of Dextrose, antibiotic & multivitamin but the bird succumbed on 25.12.16. The carcass was sent to the Prof. & Head, Dept. of Epidemiology and Preventive Medicine Cum Coordinator, Centre for Wildlife Health, College of Veterinary Science and Animal Husbandry, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar in sealed ice-packed condition for necessary post mortem of the bird. But immediate telephonic discussion with Prof. & Head revealed the bird was affected with jaundice. In the mean time DFO, Rourkela reported of serial crow deaths at CISF campus, near Indira Gandhi Park Zoo, Rourkela. A Muscovy duck died in the same pelican enclosure at I.G. Park on 26.12.16. The dead Muscovy duck from IG Park Zoo and a dead crow from CISF campus were sent separately in sealed condition to NIHSAD, Bhopal and confirmation of Avian Influenza (H5N1) was communicated to the zoo authority through DFO, Rourkela on 31.12.2016 by 1:30 PM. There were also incidences of death of one Hill mynah from pheasant enclosure and two White ibises from the same pelican enclosure on 27th, 28th and 31st December 2016.

ACTION TAKEN TO PREVENT AVIAN INFLUENZA (H5N1)

- Soon after getting the confirmation report of H5N1 at IG Park Zoo, the zoo was closed for visitors since 3:00 PM of the same day i.e. 31.12.2016.
- The water body of pelican enclosure was emptied and necessary lime painting was done including the cement structures.
- The suspected single pelican from the pelican enclosure was isolated and shifted to zoo hospital for close observation.
- Immediate action for lime painting of all the enclosures was initiated on priority basis.
- A daily report on Avian Influenza of I.G. Park Zoo is being communicated on daily basis to the Central Zoo Authority, New Delhi with copies forwarded to National Zoological Park, New Delhi, Deptt. of Animal Husbandry and Veterinary Sciences, Govt. of Odisha, PCCF (WL) & CWLW, Govt. of Odisha and Divisional Forest Officer & Wildlife Warden, Rourkela
- Necessary health check up of employees directly associated with zoo management was done at Rourkela General Hospital, Rourkela and necessary medication (Oseltamivir) was provided.
- Other employees working at IG Park but not associated with zoo activity were also provided with necessary health check up at Ispat General Hospital, Sector-19, Rourkela.
- Regular disinfection schedule was adapted with spraying of 4.0% formalin in the open roads of I.G.Park Park area & CISF campus and spraying of virucidal 'Virkon-S' inside all the zoo enclosures.
- Lime painting of all Zoo enclosures & adjacent structures.
- Surveillance for further death of birds in and around zoo area was done intensively including CISF campus at Bisra Chowk and Steel Township.
- To spread awareness, large hoardings were installed in major chowks and leaflets were distributed in the township.
- A team comprising of Senior Consultant of Public Health Department, Curator and employee of TS Deptt. have been formed for sensitizing the shopkeepers selling non-veg food materials in all Sector areas of Rourkela.
- Employees of Public Health Deptt. have been trained for proper disposal of the birds found dead in the Steel Township too.
- Surveillance is being done on a continuous basis. Death of crows and other birds are being reported to the control room formed by the Animal Husbandry Department on daily basis.

Disinfection and Sanitation

Continuous disinfection and sanitation works followed strictly as per the action plan for preventing avian influenza. Cloacal samples from existing birds were collected in three phases during the disinfection period by the Rapid Response Team (RRT) with negative results. After getting the sanitation certificate from the competent authority, Indira Gandhi Park Zoo was opened for visitors on 14.04.2017.



Zoo Administration

Sl. No.	Designation	No. of personnel(s)	Scope of Work
1	Senior Veterinary Officer (In-Charge Zoo and Deer Park)	1	Full time
2	Curator (Zoo and Deer Park)	1	Full time
3	Senior Horticulture Assistant (Zoo Record Keeping)	2	Part time
4	Senior Horticulture Assistant (Zoo Supervisor)	2	Full time
5	Horticulture Attendant (Zoo Assistant)	5	Full time
6	Senior Horticulture Assistant (Ticket counter staff)	2	Full time
7	Private Security Personnel	15	Full time

Developmental works

Different developmental works had been taken up at Indira Gandhi Park Zoo to add value in its exhibition. Renovation of old enclosures and construction of new enclosures were major target in the financial year. Renovation of monkey enclosure, heightening of zoo boundary wall up to 2 meter, modification of old rose garden as open enclosure for emus and ostriches are completed at I.G. Park. In continuation to these works, development of a Butterfly park and heightening of rest areas of boundary wall of I. G. Park are in pipeline.

Zoo Animal Exchange Programme

Animal exchange programme conducted with Zoological Garden, Alipore, Kolkata. Indira Gandhi Park Zoo added 3 nos. of hill mynah (*Gracula religiosa*) and 3 nos. of blue and gold macaw (*Ara arundinaceae*) from Zoological Garden, Alipore in exchange with a pair of four-horned antelope (*Tetracerus quadricornis*) which were born at Indira Gandhi Park Zoo. Interestingly, the four-horned antelope have given birth to 2 fawns at Zoological garden, Alipore.



Wildlife Conservation and Zoo Education

The zoo has become a nodal centre for wildlife conservation and learning. Organizing Zoo Education programmes involving the school children is a regular affair in the zoo. Among the other programmes organised during the year, the Animal welfare fortnight, Vana Mahotsava in collaboration with Odisha Forest Department, International Biodiversity Day, International Vulture Awareness Programme and Wildlife Week are significant. More than 800 students from different schools and colleges from Rourkela Township participated to learn about wildlife conservation. They were also had an opportunity to visit the Ispat Herbal Garden to know about the common plants with medicinal values.



CONTACT

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