

Nandankanan of Odisha : Wonder of the World

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Nandankanan : the nature's paradise

Nandankanan is the name of a biological park of Odisha. The literal meaning of Nandankanan is “garden of pleasure” or the “garden of Gods”. The very name of “Nandankanan” in mythology delineates the ecstatic, but imaginary beauty of the celestial garden. It also indicates the real beautiful spots par excellence on the planet earth, where one can see the panoramic views of nature and appreciate the glamour and audience that exist in featural architecture of plants and animals. Nandankanan biological park is a protected area which enjoys a spectacular position in India for its inimitable amalgamation of in situ (in place or in natural or original position) and ex situ (outside the natural habitat or off site conservation) conservation endeavours.

Geography and topography of Nandankanan

Amidst the natural scenic beauty of natural forest adjacent to Chandaka-Dampara Wildlife Sanctuary, Nandankanan maps in the vicinity of Kanjia Lake. This site covers a portion of Krishnanagar and Jujhagarh Demarcated Protected Forest (DPF) and close to Baranga Railway Station on Howrah-Chennai route. Geographically it is located between 200 48' 09"

to 850 48' 13" East longitude (Survey of India Toposheet No. 73H/15 NW).

Nandankanan Zoological Park is one of the premier large zoos recognized by the Central Zoo Authority (CZA), Government of India. Unlike conventional zoos, it covers over vast 3.62 sq. km (362.1 ha) of undulating topography with natural moist deciduous forest, water bodies and attractive landscape that provides the zoo inhabitants an appropriate natural ambience to live in harmony with the nature. Nandankanan Zoological Park (includes Kanjia Lake of 66.1 ha) comprises of 362.1 ha and Nandankanan Wildlife Sanctuary covers 437 ha (4.37 sq. km). The Zoological Park is a part of Nandankanan Wildlife Sanctuary.

The State Botanical Garden spreading over an area of 75 ha adjoining the Zoological Park was handed over to Nandankanan Management in August, 2006. Two important wetlands namely Kanjia Lake of 66 ha and Kiakani Lake of 25 ha are included under Nandankanan. The former is the main water source of Nandankanan Zoological Park and State Botanical Garden. The Zoological Park with the Kanjia Lake and the Botanical Garden has been declared as Nandankanan Wildlife Sanctuary over an area of 4.37 sq.km on 3rd August, 1979.

The wetlands support rich diversity of flora and fauna (plants and animals) which is practically a veritable laboratory for wetland education and training. So, it is listed as wetlands of national importance by the Ministry of Environment, Forest and Climate Change, Government of India in 2006. Most of the animals of Nandankanan live in open, large moated areas surrounded by natural jungle and vegetation. This offers a natural feeling of living close to their natural habitat. Nandankanan was dedicated to the public on 29th December, 1960.

Nandankanan Wildlife Sanctuary is located in the north eastern region of Khordha district of Odisha. This sanctuary, in fact, includes Zoological Park, Botanical Garden, Kanjia Lake and some adjoining swampy areas (Fig.1). It is a unique sanctuary as it is one of the few protected areas with conservation programmes blending together. It provides the quality standard housing, husbandry and health care facilities to the captive wild animals and contributes towards enriching our knowledge on wild flora and fauna, their biology and breeding, particularly on endangered species.

Nandankanan is 17 km from Cuttack and 15 km from Bhubaneswar, the state capital of Odisha by road. The nearest railway station is Barang which is less than 1 km from Nandankanan. Cuttack railway station is about 15 km and Bhubaneswar railway station is 18 km. The nearest airport is Bhubaneswar which is about 20 km distance. This indicates that road, railway and airport connectivity to Nandankanan is excellent. Accommodation for tourists is available only during day time on prior reservation from the office of the Deputy Director, Nandankanan Zoological Park.

Visitors or tourists can witness both Zoological Park and Botanical Garden comfortably since both the areas are separated by Kanjia Lake. This Kanjia Lake has been included in the list of wetlands of national importance in the year 2006 due to its rich biodiversity.

Background history of Nandankanan

The history of Nandankanan is interesting and surprising. A few number of wild animals were collected initially from different parts of Odisha for the World Agricultural Fair organized at New Delhi during January and February, 1960. After the fair, the animals were brought to Odisha in May, 1960 and were kept near Khandagiri to exhibit to the people. Because of water scarcity and improper housing, it was thought to have a zoo where the animal could be safe. Further, at that time, no zoos were there at Odisha.

Keeping this in view, the then Chief Minister Dr Harekrushna Mahtab and the Minister of Development Dr Radhanath Ratha along with senior forest officials ventured to have a suitable site for the establishment of a zoo where water source must be there. Then the famous Chandaka forest having Kanjia Lake was traced and decided to have construction work to keep the animals in captivity.

Sri SK Patil, the new Minister of Food and Agriculture, Government of India inaugurated the Biological Park named Nandankanan on 29th December, 1960. Then a Botanical Garden came up adjoining to the Biological Park in the other side of Kanjia Lake. The park along with the adjoining forest has been notified as Nandankanan Wildlife Sanctuary as Nandankanan Zoological Park in 1980 on recommendation of the Odisha Legislative Assembly Committee.

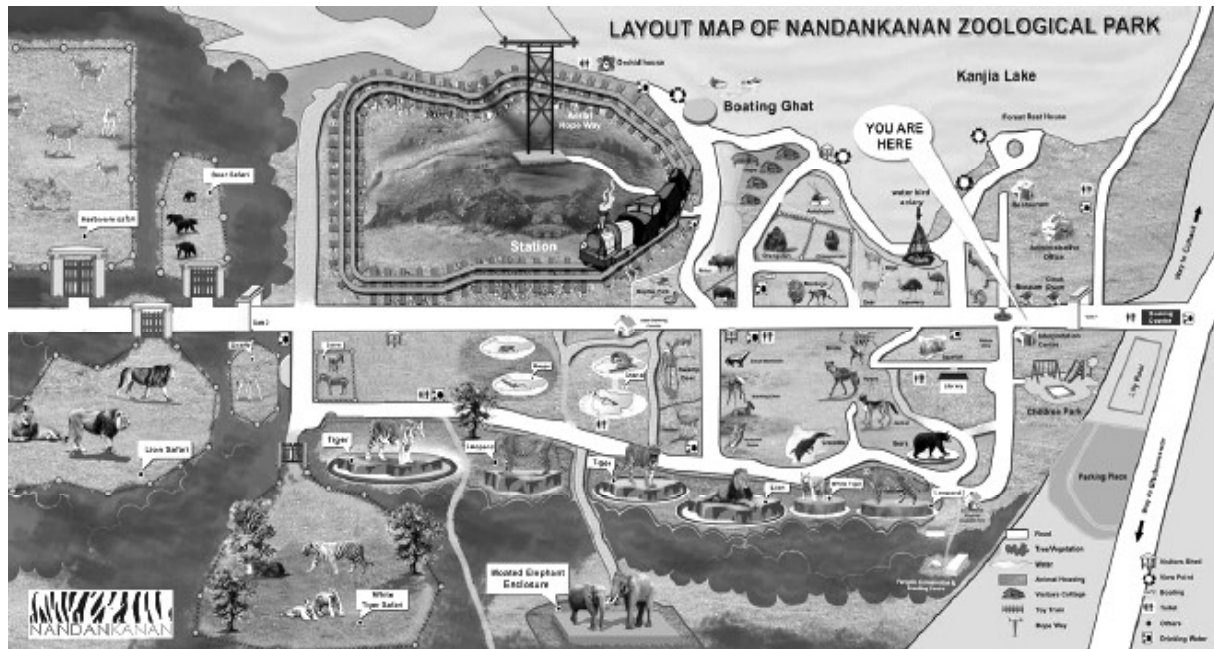


Fig. 1 Map of Nandankanan.

Gradually the structure of the sanctuary got expanded and the first tiger was introduced in 1964 from the Alipore Zoo, Calcutta (presently Kolkata) along with a pair of African lions, a puma and a pair of muggers during the session of All India Congress Committee held at Bhubaneswar. The first open air tiger enclosure was built up in 1967 and it surprised everybody that the last surviving tigress in Chandaka forest was lured on 4th January, 1967 into this enclosure, where a male tiger “Pradeep” by name was already housed. She was named “Kanan”.

With passing of time, Nandankanan achieved distinction in first ever breeding of the gharial which was brought from Frankfurt Zoo on breeding loan on 7th May, 1980. In the same year, two normal colored tigers “Deepak” and “Ganga” gave birth 3 white offsprings namely “Debabrata”, “Alaka” and “Nanda” on 8th January, 1980. By this Nandankanan opened its

own family of white tigers and a separate gene pool. On 20th January, 1984 a lion safari over 20 ha was inaugurated inside the zoo. Subsequently, the first white tiger safari covering 12 ha was also created in 1991. Two more safaris such as “herbivore (plant eating) safari” of 21 ha and “bear safari” comprising 5 ha were established in 2011 and 2012, respectively.

Apart from the introduction of several species of animals and birds, an aquarium was developed on the February, 2008 by the Chief Minister of Odisha. In course of time, many facilities and amenities namely electronic entry gate, battery operated vehicle (BOV), reverse osmosis (RO) drinking water kiosk, interpretation centre, zoo museum, life feed rearing centre etc. were created and added for attracting and facilitating tourists and visitors of the world (Table 1).

Table-1 Facilitation for tourists at Nandankanan

Sl No.	Name of the facility or amenity available
01	Reverse Osmosis (RO) water Kiosks
02	Toilets at convenient locations
03	Special toilets, wheel chairs and rams for differently abled persons
04	Rest areas, sit-outs, visitors' shed at different points
05	Tourists' Cottage
06	Restaurant and Snacks Bar
07	Cloak Room close to entrance gate
08	Perambulator for children
09	First-aid (Zoo Hospital and Administrative Office)
10	Library
11	Baby Care House
12	Emission free Battery Operated Vehicle (BOV)
13	Guide Maps
14	Publications
15	Nature Shop (Souvenir shop)
16	Childrens' Park
17	Polythene Exchange Counter
18	Trained Guide
19	Picnic Spot
20	Zoo Museum
21	Interpretation Centre
22	Transport for visiting safari

Planning and objectives of Nandankanan

On development, growth and success, Nandankanan defined its vision, mission and objectives for betterment of the society. The vision is to strengthen the efforts in conservation of biodiversity of the region through ex situ conservation coupled with in situ methods. The mission is to achieve the distinction of an outstanding zoo through world class conservation, education, research and connecting people, students and researchers to biodiversity conservation and protection (Fig. 2).

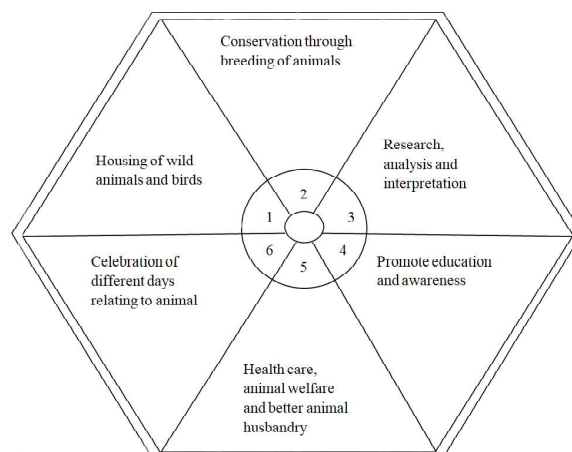


Fig. 2 Objectives of Nandankanan Zoological Park.

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However, in a nut shell, the objectives of developing Nandankanan Biological Park are as follows.

1. Housing of wild animals and birds with appropriate emphasis on research and education on their ecology, behavioral biology, physiology and enrichment in a semi-natural ambience.
2. Conservation breeding of the endangered species in captivity with least human imprints and to release them in nature to recoup their status in the wild.

3. To facilitate research and scientific analysis on animal behavior, enclosure enrichment, feed, nutrition and reproductive biology.
4. To promote education and awareness amongst visitors towards conservation of wildlife.
5. To ensure housing of captive animals and birds with emphasis on health care, animal welfare and better animal husbandry.
6. To observe outreach activities regularly including celebration of the following days (Table 2).
 - i. World Wetlands Day
 - ii. World Pangolin day
 - iii. World Wildlife Day
 - iv. World Environment Day
 - v. International Tiger day
 - vi. International Vulture Awareness day
 - vii. Wildlife Week
 - viii. World Elephant Day
 - ix. Foundation Day of Nandankanan
 - x. World Veterinary Day
 - xi. Zoo Lovers Day
 - xii. International Hyena Day
 - xiii. International Leopard Day
 - xiv. International Biodiversity day
 - xv. International Turtle Day
 - xvi. World Giraffe Day
 - xvii. World Snake Day
 - xviii. World Lion Day

Table-2 Different days for observation and awareness

S1 No.	Period of observation	Name of the day for observation
01	January 10	Save the Eagle Day
02	January 20	Penguin Awareness Day
03	January 21	Squirrel Appreciation Day
04	January 31	International Zebra Day
05	February 02	World wetlands Day
06	February 15	National Hippo Day
07	3 rd Saturday of February	World Pangolin Day
08	February 16	World Whale Day
09	February 21	International Save the Bear Day
10	March 3	World Wildlife Day
11	March 14	Learn about Butterfly Day
12	March 14	Save Spider Day
13	March 20	World Frog Day
14	March 20	World Sparrow Day
15	March 21	World Forestry Day
16	March 22	World Water Day
17	First Saturday of April	National Birding Day
18	April 8	Zoo Lovers Day
19	April 14	National Dolphin Day
20	April 22	World Earth Day
21	April 25	World Penguin Day
22	April 27	International Hyena Day
23	May 3	International Leopard Day
24	May 11	International Migratory Bird Day
25	May 14	Endemic Bird Day
26	May 17	Endangered Species Day
27	May 17	World Crocodile Day

28	May 22	International Biodiversity Day	54	October 2-8	Wildlife Week
29	May 23	International Turtle Day	55	October 4	International Zookeeper Day
30	June 5	World Environment Day	56	October 4	World Animal Day
31	June 8	World Oceans Day	57	October 21	Reptile Awareness Day
32	June 16	World Seaturtle Day	58	October 23	International Snow Leopard Day
33	June 17	World Day to combat Desertification and Drought	59	October 24	International Day of Climate Action
34	June 21	World Giraffe Day	60	November 6	International Day for Preventing Exploitation of the Environment in war and Armed Conflict
35	June 21	International Climate Change Day	61	November 12	World Birds Day
36	July 1-7	Van Mahotsav	62	November 29	International Jaguar Day
37	July 3	World Seabird Day	63	December 4	International Cheetah Day
38	July 14	World Chimpanzee Day	64	December 4	World Wildlife Conservation Day
39	July 16	World Snake Day	65	December 14	International Monkey Day
40	July 26	International Mangrove Day	66	December 29	Nandankanan Biological Park Foundation Day
41	July 29	International Tiger Day			
42	July 31	National Tree Day			
43	August 04	International Owl Awareness Day			
44	August 10	World Lion Day			
45	August 12	World Elephant Day			
46	August 14	World Lizard day			
47	August 18	National Honeybee Day			
48	August 19	World Orangutan Day			
49	August 30	International Whale Shark day			
50	First Saturday of September	International Vulture Awareness Day			
51	September 5	International Red Panda Day			
52	September 19	International Snakebite Awareness Day			
53	September 22	World Rhino Day			

Excellence of Nandankanan in national and international level

Nandankanan is the one of the excellent Biological Parks not only in India but also in the world. This spells the class of excellence owing to initiative, creative, innovative and germinative ideas of several cross section of personnels like forest officers, biologist, education officer, veterinary officer, veterinary assistant surgeon, live stock inspector and allied personnels associated with animals and their management. Nandankanan is unique because of following characteristics.

1. It is the first zoo in the country to become an institutional member of World Association of Zoos and Aquarium (WAZA).

2. It is the first zoo in the world where endangered gharials were born in captivity during 1980.
3. It is the first zoo in the world where melanistic tigers (tigers with broad black stripes) were born in 2014.
4. It is the host zoo for white tigers which were born to normal colored parents in 1980. This is a spectacular event in the world.
5. A unique white tiger safari was established in Zoological Park in 1st October, 1991.
6. It is the first zoo in the country where endangered ratel was born in captivity.
7. It is the first zoo in the country after which an express train bearing number 12815 and 12816, Puri New Delhi Express is named as “Nandankanan Express”.
8. It has a captive fodder farm over 33 acres and a slaughter house to cater to the dietary needs of animals housed in the Zoological Park.
9. Kanjia Lake inside the park has got a recognition of a wetland of national importance in 2006.
10. It has “Pangolin Conservation Breeding Centre” which is the only conservation breeding centre for the endangered Indian pangolin (*Manis crassicaudata*) in the world. This was established in 2009.
11. It has conservation breeding centre of long billed vultures.
12. It has the largest enclosures to house gharials and hippopotamus.
13. It has got credit being the second largest heronry for Asian open bill storks in Odisha.

14. It itself is an amazing centre for wildlife conservation and education where one can experience integration of ex situ and in situ conservation of wild fauna and flora.
15. It is the only zoo in India to have an open-top leopard enclosure.

Nandankanan and its animals

The foundation of Nandankanan was initiated from the exhibited animals for the World Agricultural Fair organized at New Delhi in 1960. At that time, 16 types of animals and a total of 23 animals were collected from different parts of the state for display. These animals are two spotted deer, two barking deer, two blackbucks, one mouse deer, one leopard cat, one flying squirrel, one r-tailed drongo, one hornbill, two parrots, two hill mynahs, one peacock, one mongoose, one pangolin, two porcupines, a pair of wild boars and a python.

Currently the vast zoo encompasses 158 species of amphibians, reptiles, birds and mammals. The natural forest ambience of Nandankanan is now enjoying free-living wild animals which includes 13 species of mammals, 15 species of reptiles, 179 species of birds, 20 species of amphibians, 96 species of butterflies and 51 species of spiders.

Apart from these, there are safaris namely tiger safari (12 ha), lion safari (20 ha), herbivore safari (21 ha) and bear safari (5 ha). Furthermore, nocturnal house is specially designed for nocturnal (night) animals of regional importance in spacious naturalistic enclosures simulating their natural habitat with species specific enrichment to fulfil their biological needs.

Walk through aviary for exotic birds is a unique exhibit of its kind in the country. The inmates of the aviary are an assemblage of

arboreal (tree dwelling), terrestrial (land dwellers) and aquatic (water loving) birds.

A reptile park with a gigantic life size dinosaur namely Tyrannosaurus at the entrance gate with an interpretation centre houses some reptiles. This is an attraction of visitors from a distance.

Moreover, another added beauty of Nandankanan is aquarium in which both freshwater and marine species of fishes are exhibited. The aquarium unit is maintained systematically through regular aeration, change of water and maintenance of salinity in case of marine species of fish. The interesting observation lies with the sucker fish bearing sucker on the dorsal side of the head.

Nandankanan is the first premier large zoo to exhibit amphibians (frogs, toads etc.).

Finally, besides living animals both in natural and artificially made natural condition, the museum of the zoo displays stuffed specimens by taxidermy, formalinised specimens of early developmental stages of animals, eggs of animals and eggs of flightless birds. The chronological breeding success of different animals of Nandankanan is highly noteworthy (Table 3).

Table-3 Chronological breeding success of different animals of Nandankanan Zoological Park

Sl No.	Name of the animal	Year of successful breeding
01	Indian pangolin	1971
02	Mouse deer	1972
03	Malayan giant squirrel	1974
04	Sloth bear	1978

05	Birth of white tigers from normal colored tiger	1980
06	Mugger crocodile	1982
07	Himalayan black bear	1982
08	Lion tailed macaque	1983
09	Brow antlered deer	1984
10	Salt water crocodile	1985
11	Indian porcupine	1986
12	White necked stork	1986
13	Caiman crocodile	1990
14	Water monitor lizard	1996
15	Swamp deer	1998
16	Chimpanzee	1999
17	Grey heron	2000
18	Siamese crocodile	2010
19	Ratel	2012

One more excellence of Nandankanan is the enclosure for non-indigenous flightless birds namely emu and ostrich. It houses 11 emus and 4 ostriches (2 male and 2 female ostriches) which are very large birds who cannot fly, but can run very fast. The eggs of emu are dark green and that of ostrich is white. This is how Nandankanan is proud of. This record is as of 2nd February, 2021.

Nandankanan and its botanical garden

Plants and animals are completely integral part and two sides of the nature. Both are interdependent and maintain a harmony in our ecosystem. Nandankanan is not only contributing to faunal diversity but also to floral diversity. The botanical garden is named as State Botanical Garden which spreads over an area of 75 ha. It

is situated in the sylvan surrounding of the moist deciduous forest of the sprawling greenery between two wetlands.

This garden was established in the year 1963 which was initially under the management of Horticulture Department, Government of Odisha. Subsequently, it was transferred to Nandankanan on 1st August, 2006. Now this botanical garden is one of the pioneering plant conservation, nature conservation as well as

interpretation centres of the state. It is educative, informative, attractive and knowledge productive unit. This garden is located inside Nandankanan Wildlife Sanctuary. With an area of 25 ha, Kiakani Lake is situated inside the State Botanical Garden. The garden is kept open on all public days except Mondays from 7.30 AM to 5.30 PM from April to September during summer and 8.00 AM to 5.00 PM from October to March during winter season. Botanical Garden is beautiful and colorful by having 26 varieties of gardens (Table 4).

Table-4 Satellite gardens of State Botanical Garden

Name of the garden	Area	Speciality
Glass House	2013 sq. ft	Succulent plants, Bonsai ornamental plants from November to March
Cacti House	1080 sq. ft	Varieties of cacti and succulent plants (More than 1,200 cacti)
Dry Garden zone	0.65 acre	Designed with loose stone work to look like a dry zone
Green House	5,200 sq. ft	60 species of indoor plants are housed
Children's Park	-	Facilities for kids with ornamental plants
Buddha Park	12,000 sq. ft	Located in Kanjia Lake having Buddha statue at the centre and ornamental flowers at periphery
Artificial Zoo	-	Models of different animals are available
Butterfly Park	36,590sq. ft	6,400 butterfly dependent plants having water fall with 170 sq. ft, fountains and artistic bridge. 58 species of butterflies are here being open on February, 2014
Butterfly Interpretation Centre	800 sq. ft	Opened in March, 2015. Colorful pictorial board on various aspects of butterflies. A short documentary on butterflies is other attraction
Rosarium	1.5 acre	Collection of 1,200 rose plants belonging to 55 varieties

Orchid House	5,000 sq. ft	More than 1,000 orchids of 57 varieties belonging to 37 species
Medicinal Garden	2.26 acre	225 species of herbs, shrubs, creeper, climber and trees
Japanese Garden	0.5 acer	Developed in Tsukyama-niwa style with floating streams in Japanese style
Mughal Garden	1.01 acre	A cascade of flowing water and flowering plants both seasonal and perennial giving a look of Mughal era
Evolution Garden	0.77 ha	Shows evolution of plant kingdom
Heritage Garden	1.2 acre	It is with natural rock and old Banyan trees. Tulsi garden with six varieties of Tulsi with models of monk, live size cow and tribal hut
Arboretum	4.0 ha	234 species from 49 families found in Eastern Zone forest
Landscape Garden	1.6 acre	Lawns, trees and shrubs. 1,000 trees of different species
Palm Garden	15,000 sq. ft	Common and rare palms. 29 varieties with a designed water body with 15,000 sq. ft grass carpet
Bougainvillea Garden	21,400 sq. ft	More than 1,000 Bougainvillea plants of different colors with 8 varieties. A series of creepers is raised on the back of the garden
Hibiscus Garden	11,000 sq. ft	More than 130 plants of 27 varieties
Carnivorous Plant Garden	800 sq. ft	Nandankanan is first of its kind to display carnivorous plants of 4 species
Hydrophytes Garden	0.1 acre	Collection of 23 varieties of aquatic plants

Scientific research and development of Nandankanan

Nandankanan has been playing a role in scientific research on animals to promote growth, development, longevity and reproductive ability in captive condition. The institution is extremely careful about housing, enclosures, feed, nutrition, faecal matter analysis, blood testing, pathogen and

parasite (both ecto and endoparasites) testing which are undertaken by inhouse zoo veterinary doctors along with the assistance of the College of Veterinary Science and Animal Husbandry (CV Sc and AH), Bhubaneswar, collaborating scientists of other institutes like the Utkal University, CIFA, CARI, CPDO and allied institutions.

Funding for research is provided by the Central Zoo Authority, New Delhi and the Government of Odisha. To encourage and facilitate the process of research and analyses, one biologist and one education officers are posted. Apart from routine testing and examination, research on following animals is strengthened and emphasized for preservation, conservation and breeding status of the endangered species.

1. Indian pangolin conservation breeding programme is being monitored through the infrared sensitive CCTV cameras which is unique in world.
2. Conservation breeding of long-billed vultures is another programme through vulture conservation breeding centre to fulfil the objective for captive management and breeding of the long-billed vultures.
3. Since gharials are critically endangered, seven gharials bred and reared at Nandankanan which have been rehabilitated in the river Mahanadi during 2019-20 for a sustainable population.
4. Realizing the gravity of forensics, a wild life forensic laboratory has been developed in the park for scientific investigation of wildlife crime. The requisites are purchased from CAMPA fund.

Visitors' attraction for Nandankanan

As a Biological Park, Nandankanan is projected as one of the best parks in India which is being reflected through the achievements, numerical strength of the visitors, maintenance,

management, research and more specifically facilities for the visitors or tourists. Following facilities cater to the need of the visitors because of which our guests of Nandankanan fail to face problems and appreciate the amenities meant from kid to old (Table-1). But, free facilities are available for aquarium, cloak room, baby care house, entry of differently able persons, entry of children below 3 years, digital still camera, perambulator for children, walk through aviary, RO drinking water, toilets and wheel chair for differently able persons.

Animal exchange and procurement of Nandankanan

To encourage, attract, stimulate and accelerate the number of visitors to Nandankanan, the Zoological Park houses both indigenous and exotic species of animals. Different animals have been brought and procured in different periods (Table-5). The amazing story and history of the zoo or Biological Park is the introduction of animals from other countries and other states through animal exchange programme which is stated below (Table-6). This not only strengthens the relationship between countries and states but also amplifies the affinity of the tourists to view the animals and birds of other places. The remarkable example of interesting animals and birds are Giraffe, Lion, Tiger, Lion-tailed macaque, Nilgiri langur, Indian pangolin, Porcupine, Melanistic tiger, Four horned antelope, Manipuri deer, Leopard, Different varieties of colorful birds, Emu and Ostrich etc.

Table-5-6 Exchange of animals and procurement, 2019-2020

Sl No.	Name of the animal	Nature of the zoo	Place	Period of procurement
01	Black Tufted Marmoset	AFAZ Farm	Madurai	15.02.2019
02	Indian Fox	Kamala Nehru Sangrahalaya	Indore	08.08.2019

03	Indian Grey Wolf	Kamala Nehru Sangrahalaya	Indore	08.08.2019
04	Tufted Capuchin	Jai Farm	Chennai	03.10.2019
05	Squirrel Monkey	Jai Farm	Chennai	03.10.2019
06	Nile Crocodile	MCBT	Mahabalipuram	22.10.2019
07	Yellow Anaconda	MCBT	Mahabalipuram	22.10.2019
08	Asiatic Lion	Kanan Pindari Zoological garden	Bilaspur	17.03.2020
09	Indian Fox	Kanan Pindari Zoological garden	Bilaspur	17.03.2020

Animal adoption scheme of Nandankanan

There is a general concept that Nandankanan Zoological Park is the property of the government to take care of the animals and birds, to maintain the same, to manage and to increase the population through proper feeding, breeding and housing protocols. But, time has come, general public have realized the importance and significance of the animals of nature or our surrounding.

So a peoples' movement towards conservation and preservation of both plants and animals has brought a different momentum. Zoos across the world have thought of adoption scheme with an objective of involving general public in the conservation, preservation and protection of rare, threatened and endangered fauna. In this scheme, individual, corporate, organizations and philanthropists can adopt an animal or animals by way of contributing the cost of feed of individual animal along with its maintenance and health care as per the schedule and rule framed by the Nandankanan Biological Park.

To expedite smoothly or quickly, this process is undertaken through online mode and

even through the introduction of mobile android App. The adoption charges are defined by the authorities of Nandankanan under four different categories such as (i) Annually, (ii) Half yearly, (iii) Quarterly and (iv) Monthly. Moreover, the persons who will adopt the animals of Nandankanan can avail privileges which have been proposed systematically. The privileges are categorized into eight types namely (i) Level-I (Rs.500-Rs.10,000), (ii) Level-II (Rs.10,001-Rs.25,000), (iii) Level-III (Rs.25,001-Rs.50,000), (iv) Level-IV (Rs.50,001-Rs.75,000), (v) Level-V (Rs.75,001-Rs.1,00,000), (vi) Level-VI (Rs.1,00,001-Rs.1,50,000), (vii) Level-VII (Rs.1,50,001-Rs.2,00,000) and (viii) (Rs.2,00,001-Rs. 2,50,000).

Nandankanan : the pride of the world

Nandankanan Biological Park has been marching ahead with progressive ideas, housing of animals and birds almost exactly in natural congenial condition, providing nutrition to animals as per their natural food from the environment including the supply of fresh and hygienically processed buffalo meat for the carnivores through

captive slaughter house and different types of grasses and fodders to the herbivores from captive fodder farm of the zoo along with seasonal food and enriching the strength of faunal diversity by the regular introduction of animals and birds of different places and different species of the state, country and world at large.

The horizontal and vertical expansion reflects the growth, development, achievement and success of such a zoo which has drawn the attention of the world. The most touchy point is that the park has a vermicompost unit located inside the fodder farm where the organic waste of the zoo is being converted to natural fertilizer using earthworms (vermicompost). Not only that, drinking water part of animals is also well taken care of. The park has its own chlorination plant to ensure the supply of purified drinking water and thereby the spread of waterborne disease is regulated or controlled. Since health care is observed, health is regularly checked up and monitored, the mortality rate of captive animals are significantly less. These are the strengths of Nandankanan for standing erect and occupying a crystal clear position in India as well as world. The support of the visitors, tourists and public at large would certainly magnify the strength, beauty and longevity of such an amazing natural floral and faunal diversity of Nandankanan Biological Park.

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