The evolving role of Indian zoos as “Centers for Education” with special reference to National Zoological Park, New Delhi

Introduction
One of the valuable resources for environmental education today in the developing countries includes zoological parks, sanctuaries, nature centers, museums, and related organizations. These institutions play a significant role in developing an understanding of our relationship with nature and the need for its conservation. Zoological parks attract large population of the society; in India, millions of people visit zoos annually which are slowly evolving from menageries to conservation and educational centers with time.

With the changing scenario, the Government of India realized the need for making conservation as one of the main objectives of zoos. Accordingly, policies formulated by Central Zoo Authority also made emphasis on the educational role played by the zoos in creating awareness about wildlife and its conservation as the zoos are visited by a large number of visitors. Since then, the Indian zoos have been evolving themselves to serve as a potential tool for educating people about conservation of nature.

A signage on animal welfare concept developed by Sally Walker.
In recent times some Indian zoos have emphasized on zoo education and interpretation and have provided facilities to educate including students from schools & colleges and researchers. These facilities include the education center, interpretation center, library, informative signages, guided tours, virtual tours, research activities, souvenir shops, eco day celebrations, etc.

Apart from these the zoo objectives and mission/vision statements are guides around which all the zoo's educational activities are revolved. Besides, the National Zoo Policy 1998 states that “to inspire amongst the zoo visitors empathy for wild animals, an understanding and awareness about the need for conservation of natural resources and for maintaining the ecological balance”. The National Zoo Policy 1998 further states that “each zoo should have a well-drawn-up plan for educating the visitors as well as others in the community”. Accordingly, the zoos in India have formulated various awareness plans and have been using various means for educating their visitors about the importance of wildlife, zoo animals, captive breeding, etc.

The report gives a brief overview of the various means used by the Indian zoos with emphasis on the National Zoological Park, New Delhi, India for spreading awareness about wildlife and its conservation among zoo visitors.

The National Zoological Park, New Delhi, popularly known as Delhi Zoo is home to a variety of species of plants and animals. It was established in the year 1958 as a model zoo for the country and is visited by a large
number of visitors every year. Presently, it does not only help in the conservation of endangered species but also in pursuing various breeding programmes, welfare programmes, rehabilitation initiatives as well as creating environmental awareness amongst zoo visitors.

Following are some of the different means used by the National Zoological Park which may help in creating awareness among the different folks of the society:

A. Mission statement: A mission statement is considered as the written declaration of the purpose of an institution and it also designed in such a way so as to provide guidance for institutional planning, administration, and communication. Indian zoos have different mission statements depending upon the operation of the zoo, type of visitors, facilities, etc. Vision/

Mission statement of Indian zoos shows that the zoos are involving themselves more in the area of zoo education, awareness and conservation as mandatory under the Recognition of Zoo Rules, 2009, i.e., “Every Zoo shall endeavor to educate the visitors and the people at large about the significance of wildlife conservation for the general well-being of the people and keeping the life support system of nature intact and efforts shall be made to make people aware about the role played by the zoos in this regard and the ways and means through which general public can participate and contribute for the same ”.

Vision/Mission statement of the National Zoological Park, New Delhi
“To generate awareness and compassion in the society towards wildlife and to garner their support for the national conservation efforts”.

Students participating in an awareness programme.
B. Education center: The Zoo has an education center/interpretation center where the zoo organizes various lectures/talks from renowned and experienced persons in the field of wildlife for the visitors including the school students, college students, and researchers. Various slide shows and documentaries focused on the various aspects of nature and animals etc. have also been organized.

C. Animal exhibits: The Zoo has animal exhibits that have been designed as natural as possible according to their behaviour and needs, i.e., to reflect the requirement of the displayed species so that the animal displays their natural behaviour in the zoo. This is as per the National Zoo Policy 1998, which emphasizes that the “Zoo shall display animals in such enclosures only where the animals do not suffer physiological and psychological restraint”. Therefore, the animal exhibits were with time modified with natural components—grass, trees, bushes, rocks, etc.—as well as enrichment practices carried out for the animals. These types of exhibits give an opportunity to the visitors to see animals in their near natural settings, i.e., in the wild as much as possible. This, in turn, improves the conditions for the animal and helps in enhancing the viewing experience of the visitors along with developing an understanding of the natural behaviour of the animal- natural feeding behaviour, sleeping, pacing, social behaviour, etc.

Different signages at the National Zoo.
D. **Signages:** Signages including animal boards and signboards also play an important role in disseminating information about the zoo and animals. The Delhi Zoo has displayed various signboards, wayside exhibits both in Hindi and English. The signages provide information about the species displayed- their scientific name, number, lifespan, diet in the wild and zoo, habit and habitat conditions in nature, breeding aspects, fascinating facts, etc. The identification of flora and fauna through attractive information boards in the zoo serves as one of the important methods to educate the public. This can help in sensitizing the visitors about the important aspects of the animals they are seeing in the zoo. Besides, the Zoo displays signboards for guiding the visitors and also about the Do's and Don’ts to be followed while visiting the zoo with emphasis on the welfare of the animals.

E. **Celebrating important days/events:** As per the National Zoo Policy 1998, a formal education programme should be pursued in the zoos for strengthening the education message. The Zoo has been celebrating important days for creating awareness and strengthening the education message among the different sections of the zoo visitors. Besides, the zoo also celebrates birthdays of the animals in its collection as a means of spreading the message about the housing and upkeep facilities provided.

F. **Use of volunteers:** A large number of volunteers have been serving the National Zoo for many years which helps it in organizing various events, guiding visitors, and also helps in spreading wildlife conservation education amongst the visitors in addition to their various research projects.

G. **Research activities:** In National Zoological Park, New Delhi students and researchers from several Universities and Colleges are undergoing research activities on various aspects of animals like management, behaviour, healthcare, enrichment, etc.

H. **Guided tours:** Exposing primary school children to wild animals has been considered as one of the traditional approaches to environmental education which resulted in cognitive gain and improved attitude towards wildlife conservation and management. Thus, many Indian zoos have been organizing guided tours to the school at various levels, college students and teachers, etc. around the zoo for on the spot observations and study of the animals in the zoo.

Non-Governmental Organizations (NGO’s), universities, and colleges have also been encouraged by the zoos to set up various awareness programmes in the zoo including competitions, quizzes, lectures/talks, exhibitions for groups of school
children, clubs and visitors in the zoo. Similarly, the Delhi Zoo on one occasion in collaboration with the National Museum of Natural History organized a Nukkad Natak highlighting Wildlife and Environmental issues performed by artists at Delhi Zoo which gave a message on conservation of Environment and wildlife by great and interesting dramas.

I. Concession for school children: Several Indian zoos, for the purpose of educating and motivating schools/school children to visit zoos charge them half the price of the ticket to enter the zoo and learn about animals. A similar practice has been used by the Delhi Zoo for encouraging school group visits more frequently.

J. Zoo education through publications: Souvenir Shops in the zoos, distribution of attractive brochures on zoo activities, individual notes on important aspects of the zoo, use of stickers and postcards, etc. are different informal modes used by the Indian zoos for enhancing and promoting the zoo’s image as an instrument of education. The National Zoo uses posters, brochures, pamphlets, etc. for highlighting the activities of the Zoo and spreading the message of conservation.

K. Other measures: The use of different social media platforms for creating awareness has become one of the best modes for attracting a large number of people. The Delhi Zoo also uses social media platforms like a Facebook page, Twitter, and YouTube channel which provide information on different aspects of zoo animals like their behaviour, activities, general information, enrichment, etc.

Way forward.....In order to develop zoos as educational institutions, there is still a need for Delhi Zoo to make dedicated efforts and focus more on developing an understanding about the interests of the zoo visitors towards various aspects of the zoo and gain knowledge about the impact of the zoo visit on the children, students and visitors, i.e., the zoo should evaluate their understanding of animals, etc. for better management of the educational and outreach activities at the zoo.

Further, the awareness and education strategies/programmes/outreach activities used by the zoo should also be evaluated from time to time so that the main message of zoos as conservation/education institutions will be achieved. In short an education plan is the need of the hour.