

## THE STUDY OF PUBLIC PERCEPTION FOR CAPTIVE ANIMALS AT LAHORE ZOO, PAKISTAN

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### ABSTRACT

The zoos have historically been identified as sites for the entertainment of general public and continue to be dependent on the revenue through visitors. Contemporarily, zoos are now defined as active sites for wildlife conservation. They now act as sites for conservation, education, research and entertainment. This research assessed how people perceive the role of Lahore zoo in conservation of endangered species. The study was conducted through questionnaires, which included the questions about endangered species kept at Lahore zoo, health and general maintenance of animals as well as enclosures, the facilities provided for the visitors (including eatables, drinks, restrooms), purpose of visit of the respondents at the Lahore zoo, the role of education office and the opinion about medium of education that Lahore zoo used to spread the information about the activities at the zoo. People were also asked about which animal they liked the most and which animals they would like to see at the Lahore zoo. The respondents were also inquired about any suggestions and recommendations for the improvements at the zoo. A total of 190 visitors were surveyed for these questions. The results showed that the perception of most of the visitors about the role of Lahore zoo for the conservation of endangered species was satisfactory but there were still some concerns about the methods of education and modes of information used by the zoo management.

**Key words:**Public awareness, Ex-situ conservation, Lahore zoo

### INTRODUCTION

Zoos play a vital role in wildlife management and conservation. They are the sites of ex-situ conservation. The role of zoos for wildlife management has revolutionized a lot through being a source of entertainment to the conservation sites to institutes for research and public education. Zoos are playing important role in animal welfare by being sites of conservation, entertainment and institutes for research and public awareness on wildlife management and related issues. Although zoos are placing a major emphasis on later ones, a major ratio of visitors still visit the zoo for recreational purposes. Zoos are either considered as conservation centers or refuge centers for animals, which protect them from threats due to anthropogenic activities (Reade and Waran, 1996; Anderson *et al.* 2003; AZA, 2008). In Pakistan, the role and targets of local zoos are not precisely defined. Being a developing country, its ecosystem is bearing a great amount of pressure, resulting in fragmentation and destruction of natural habitats of animals, which is consequently threatening the survival of wildlife (Tribe and Booth, 2003).

Lahore zoo is one of the oldest zoos of the world and it covers the area of 10 hectares (25 acres). The zoo was established in 1872 and now it is under the supervision of Wildlife and Parks department. A project entitled "Master planning Development and Improvement

of Lahore zoo" has recently been completed on 30-06-2012, with a cost of 125 million rupees. The Lahore zoo is self-supporting, revenue generating institution. The records show a clear increase in the number of visitors in recent years ([www.lahorezoo.com.pk](http://www.lahorezoo.com.pk)).

The aims of this study were to assess the perception of people about the captive animals at Lahore zoo and to understand the view of people about the role of Lahore zoo in conservation. Such information is essential for the administration of the zoo to improve their management and efficiency about the advertisement of conservation and special breeding programs at the zoo. This is also vital to improve the policies and management practices at the Lahore zoo.

### MATERIALS AND METHODS

The study was conducted at Lahore zoo (Figure-1) which is located at the Mall Road, Lahore, Pakistan, (31.556006° north and 74.325959° east). For data collection, a social survey was conducted at Lahore zoo for the time period of 45 days, from February 2<sup>nd</sup>, 2014 to March 20<sup>th</sup>, 2014. The questionnaires were distributed to the visitors, visiting the zoo, including weekdays, weekends and public holidays, to ensure that a wide range of people from different backgrounds were included in the survey

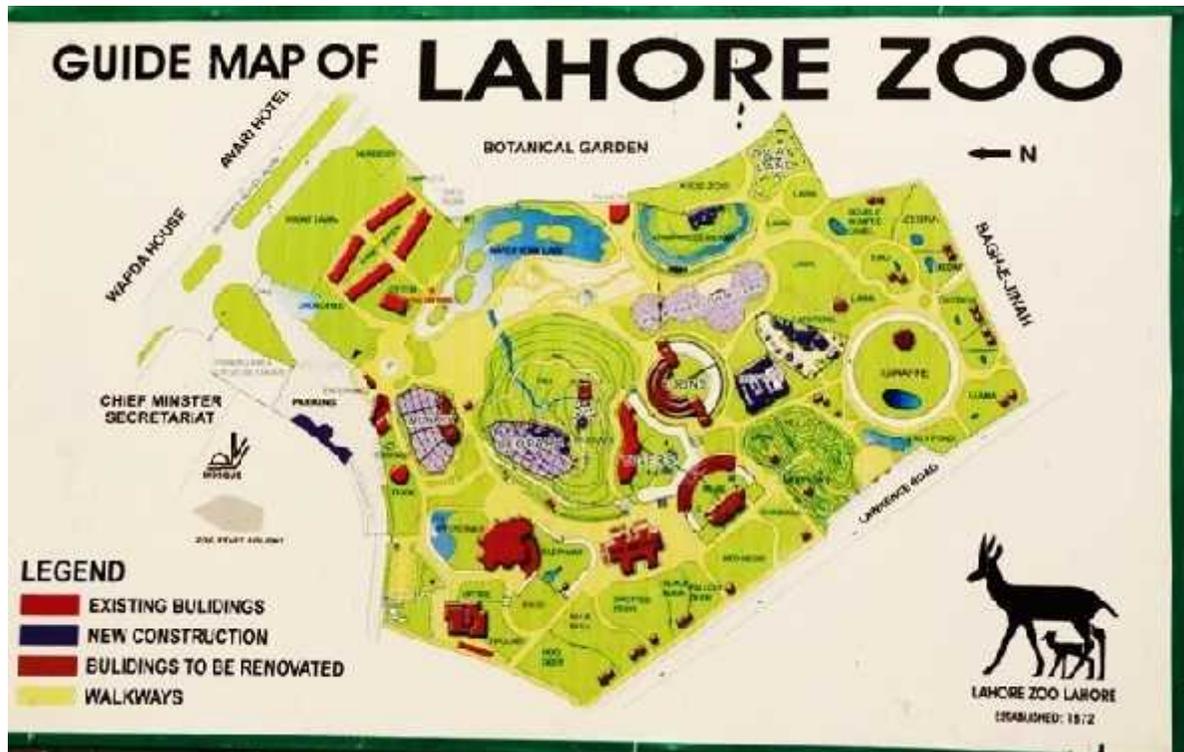


Figure 1: The guide map of Lahore zoo

. About 200 questionnaires were distributed, out of which 190 usable responses helped in interpreting the results. The questionnaires mainly presented 3 types of question; (1) open questions (visitors' opinion), (2) closed questions (yes or no) and (3) multiple choice questions (choose suitable option). The questions were arranged into five main topics: 1) Reasons for visiting zoos, 2) Causes and effects of extinctions, 3) Knowledge of endangered animals, 4) Role of the ideal zoo, and 5) Environmental education.

## RESULTS

Out of total 190 questionnaires, the majority of the responses were from males (65%). The females were either reluctant at first or least interested (35%). About 74% of them said that they had visited Lahore zoo before. This indicated that the visitors found the zoo sufficiently entertaining recreational spot. The prevalent age group of the visitors was 17-24 years of age, comprising 71% students. Most of the students (35%) were at graduation level. 89% of the visitors said that zoo was easily accessible and the ticket prices were reasonable.

In terms of reasons of visiting the zoo, most of the people (56%) were there for a fun day out, 65% hanging out with their friends, 17% for a family picnic and only 13% with a school or college tour. Only 21%

of the visitors said that they came to learn about the animals kept at the zoo, as shown in Figure 2. This indicated the level of information and interest in students and reflects the need to emphasize the conservation and extinction issues in formal education.

A major frequency (81%) of the respondents was unaware of any endangered species kept at Lahore zoo for the conservation purpose (Figure 2).

### Do you see any endangered species at Lahore zoo?

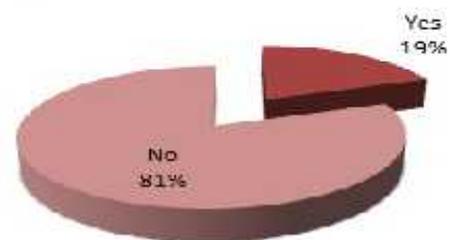


Figure 2: Awareness about the endangered species at Lahore zoo

This indicated that they were equally unaware of the destruction of the natural habitat for wildlife and that in-situ conservation programs were difficult to implement. The response ratio was 75% for the statement that animals should be kept in wild, natural habitats and indicated the same results as shown in Figure 3.



Figure 3: Purpose of visiting the zoo

For the questions regarding health and general maintenance of the animals as well as their enclosures; 38 % agreed that animals were in healthy condition (Figure 4) and seemed at ease with the environment of cages and with their interaction to the visitors.

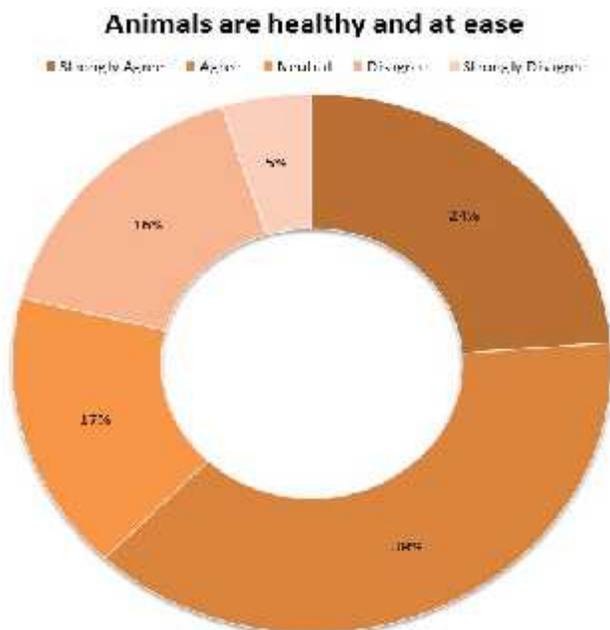


Figure 4: Health of animals in captive conditions

About 48 % people said that enclosures were clean and well-maintained (Figure 5). 56 % people agreed that there was good selection of animals kept at Lahore zoo (a correlation with their personal likes and dislikes, and not with the view to conservation). 47 % visitors agreed that the information signs with the enclosures of each animal were informative and sufficiently detailed.

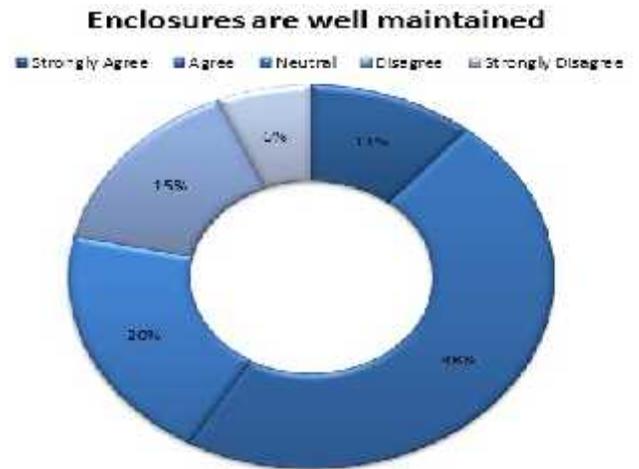


Figure 5: Maintenance and cleanliness of enclosures

About the perception of general public for the role of Lahore zoo in conservation; 40 % agreed that the role of zoo was satisfactory for conservation work, while 29 % remained neutral or less interested, as shown in Figure 6.

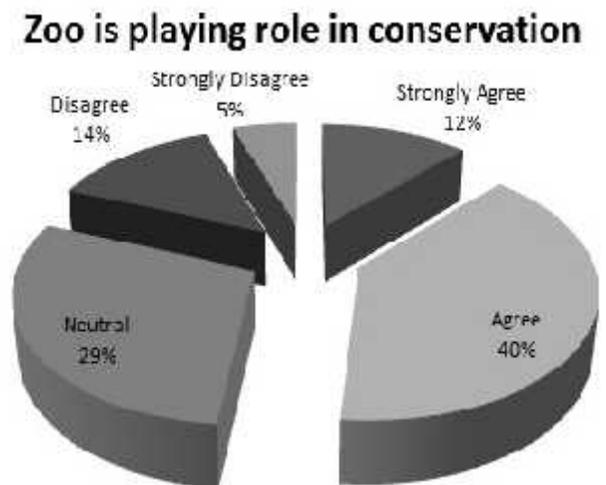


Figure6: Role of Lahore zoo in conservation

About 29 % visitors said that providing a site of recreation and fun should be the priority of Lahore zoo. 26 % people said that it should focus on environmental education programs and conservation strategies. 13 % agreed that it should launch the breeding plans for the conservation of endangered species (Figure 7). According to 37% respondents, environmental pollution was the main reason for the extinction of the animals. Only 15 % said that they thought predatory hunting to be the main reason for extinction.

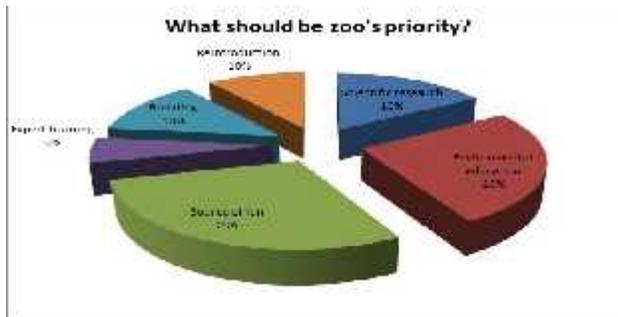


Figure 7: Views of the visitor, about zoo's priority

Most of the visitors (33%) said that zoo should spread the information about conservation, endangered species kept at the zoo, breeding and reintroduction programs through internet, as shown in Figure 8.

What mode of education Lahore zoo should adopt?

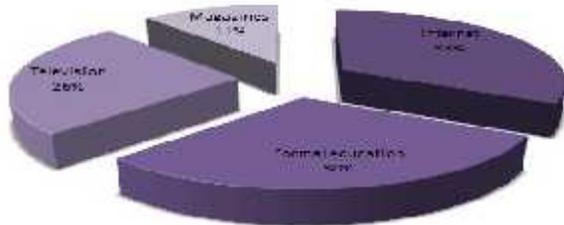


Figure 8: Most suitable mode of education that Lahore zoo should adopt

This ratio could be easily correlated with the fact that students were the prevalent group of visitors. It also indicated that they were interested to know about the zoo. It might also have some implications while developing effective website design and its efficient update to promote the Lahore zoo to the general public.

Majority of the visitors (69 %) were unaware that there existed any education office at Lahore zoo which could help them in providing any required information. 30 % agreed that Lahore zoo's website or Facebook page was helpful in providing updates and information, while 19 % disagreed and suggested that it should be improved (Figure 9).

Website or facebook page of Lahore zoo is helpful for providing information

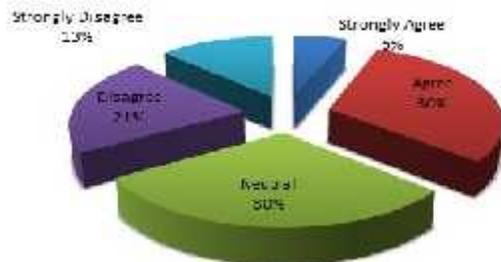


Figure 9: Efficiency of Lahore zoo website/ Social media page, in providing information

## DISCUSSION

Zoos have been the sites of display of wild animals and source of entertainment for public. But in the past few decades, their role has undergone considerable modifications. The current study was aimed to measure the understanding of a lay man about the animals kept at zoo (i.e. why the specific animals need to be kept in the zoo in the first place, what is the status of their natural habitat, what is their conservation status and what measures are to be taken for their preservation). Moreover public opinion is very important to assess the extent to which zoos are fulfilling their objectives for the reason that visitors are the main resource for funding for whatsoever conservation plans zoo is involved in and are the main target group for educational initiatives by the zoo. So, this study used a combination of current literature review and a survey among the zoo visitors. In a developing country like Pakistan, zoos are mainly perceived as being source of fun and sites for recreation. It is important to note that no such study has previously been documented to measure the responses of the zoo visitors and to analyze the results as a tool for future policy formulation and management. So, evidently these assessments have played no part in formulation of management policies of Lahore zoo.

Assessment of public perception has not been the center of interest of most research while its importance cannot be denied. There are only a few documented results relating to public opinion about zoos. The current study was also an effort to make the concerned authorities realize the potential of public assessment in improving the conditions of zoos and the animals kept there. A similar study was carried out in Malaysian zoos and three zoos were compared for their roles in recreation, research, education and conservation. The study showed that there is lack of proper education and awareness about role of zoo in conservation. People were of the view that zoos are places of recreation and entertainment and keep animals to attract visitors; some respondents were knowledgeable about issues of conservation, extinction, captive breeding, reintroduction and environmental enrichment and said they felt motivated to see the zoo to achieve the goals stated in zoo mission statement. According to priority order, the visitors categorized the roles of zoos as conservation, research, education and recreation (Paun and Zakaria, 2007). Christoffersen *et al.*, (2013) analyzed the role of regional zoos in Brazil, about environmental education. For this purpose, four zoos were surveyed with 400 questionnaires each. Most of the respondents from zoos said that zoo's main role was recreation and entertainment. However, visitor from one zoo stated that they came to learn about education program about environment conservation in the zoo. In the light of results of this study, the authors proposed that zoos must

focus on the public education about conservation of biodiversity. Similar results were obtained from the current study because most of the people thought that Lahore zoo should focus on being the source of fun. According to the survey, most of them came for a hang out with friends or at a family picnic.

The current study was also an effort to make the concerned authorities realize the potential of public assessment in improving the conditions of zoos and the animals kept there. In some other countries like Malaysia, Australia and New Zealand, some surveys have been carried out recently. Most of those assessments concluded that zoos are now playing significant role in the conservation and public awareness by their education or research programs (Fernandez *et al.* 2009). These studies also revealed that still a lot of work needs to be done to emphasize on the public awareness about the endangered species and the conservation of biodiversity and their natural habitat.

This study has been a pioneer source for the policy makers of Lahore zoo in various aspects. It has provided the data on the opinion of visitors on general and specific facilities, provision of information and informal education about their strategies for conservation and natural ecosystems. It has helped to bridge the gap between the zoo authorities and a lay man, raising some questions and consequently some expectations from the management as well as administration of the Lahore zoo (Clayton *et al.* 2009).

The results of the current study and survey suggested that Lahore zoo is pretty good as a site of entertainment, where people come to hang out and have fun. The collection of animals kept at the zoo is interesting and is liked by the visitors. But this choice has nothing to do with their conservation status. People are mostly unaware of the endangered species, the importance of in-situ and ex-situ conservation and the significance of environmental education and natural ecosystem damage control. Lahore zoo is involved with research and educational programs as well as internship but such programs need a targeted marketing and proper advertisement to draw the attention of visitors that will consequently increase the funds for carrying out such plans in future.

**Recommendations:** In the light of all issues discussed above, a number of important suggestions can be proposed for the concerned authorities. The first and foremost responsibility of the zoo is to work for the welfare of endangered wild species of the region. The Lahore zoo should redefine its concern for the cause of conservation and should formulate future plans for captive breeding, conservation of natural ecosystem and in-situ conservation plans as well. The Lahore zoo could integrate modern medium of formal or informal education to provide the proper and handy information

about the on-going and upcoming conservation, breeding or entertainment programs. The zoo should plan on to shape a marketing and finance department as well (Hosey, 2005). According to the statistics provided by the Lahore zoo, the zoo is a self-supporting organization and its revenue as well visitors are increasing every year. The information, education and public relation departments should be more specific to their goal to educate people, to spread awareness, to facilitate the visitors, to foster the concept of captive breeding as well as the rehabilitation of destructed natural environment of the endangered species. So, if the Lahore zoo is to compete with the upcoming challenges and to keep up with the spatial and temporal needs, it should formulate and modify the strategies for the propagation of its mission statement and awareness programs about its role in conservation by educating and inspiring its visitors, which in turn will surely increase the annual turn out of the visitors and a considerable increase in the revenue as well.

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