A Survey to Evaluate Zoological Park Visitor's Satisfaction

Dr. Ramneet Kaur
RIMT University, Mandi Gobindgarh, Punjab, India
Email Id- ramneetkaur@rimt.ac.in

ABSTRACT

Tourism is a significant development driver for financial and social development, job creation, and poverty alleviation. It also has a significant responsibility to contribute in encouraging the state's economic development to be quicker, more sustainable, and more inclusive. India has the most diverse terrain and climate, allowing a diverse variety of plants and animals to thrive. Including its very old cultural history, a plethora of landmarks, and nature's bounty, Odisha epitomizes a thriving tourist industry. Zoos have long been popular meeting places for families and friends, and many individuals find psychological solace in taking in the natural environment and engaging with animals. Zoo visitors come to the zoo with a diverse set of motivations, interests, and knowledge about animal conservation and environmental problems. The main goal of this study is to determine the degree of satisfaction of zoological park visitors at Nandankanan based on several factors such as communication, visibility, and information availability. From September to December 2016, data was gathered from 250 visitors in a random sample utilizing structured questionnaires. The majority of tourists are pleased with communication facilities, information availability, and enclosure, visibility, and guide services. To fulfil the overall level of satisfaction of tourists, the lot of wildlife, exhibition services, leisure facilities, and other amenities need to be improved.

Keywords

Eco-tourism, Nandankanan Zoological Park, Questionnaire Survey, Satisfaction Level, Visitor's Satisfaction.

1. INTRODUCTION

India has the most diverse terrain and climate, allowing a diverse variety of plants and animals to thrive. India's great diversity of wildlife is a natural gift that makes it an excellent destination for wildlife tourism [1]. As a result, India is home to many nature preserves and conservation areas that aid in the preservation of species in its native surroundings. The diverse variety of plant and animals native to India is the primary cause for the country's rapid development in nature-based tourism. Across the country, there are over 400 animal reserves and 99 national parks [2]. Zoos provide chances for tourists to study about preservation and provide practical recommendations for individual environmental action. With conservation efforts, teaching, research, animal care, ecological enrichment, and species reintroduction, zoos strive to fulfil their conservation mission [3-7].

Tourism is a group of activities, services, and industries that offer a travel experience for individuals or groups travelling away from home, including transportation, lodging, shopping, entertainment, and other services [8]. Tourism is defined as short-term travel for entertainment, relaxation, familial, or business reasons. Tourism is a significant development driver for economic and social development, job creation, and poverty alleviation. It has a significant responsibility to contribute in encouraging the state's economic development to be quicker, more sustainable, and more inclusive. It has a greater chance of fostering pro-poor development than many other industries, including as hotels, transportation, shopping, and food, which benefit people from all walks of life [9-13].

Zoos have long been popular meeting places for families and friends, and many individuals find emotional solace in taking in the natural environment and engaging with wildlife. Zoo visitors come to the zoo with a diverse set of motivations, interests, and knowledge about animal conservation and environmental problems. It makes developing and implementing educational programs more difficult [14-18].

Despite its rich cultural and religious history, Odisha's natural attractions play a very little part in global tourism, despite its enormous potential for development. With some of its old cultural history, a plethora of monuments and natural bounties such as resort areas, eco-tourism, plants and animals, species diversity, and nature reserves and preserves, Odisha epitomizes the rich tourist industry. The Golden Triangle of Odisha is comprised of Bhubaneswar, Konark, and Puri [19].

2. LITRATURE REVIEW

The below include a few studies on tourist experience conducted by various academicians. Unfortunately, there is no literature available relating to tourist experience at Nandankanan in particular. Shaw investigated the public's interest in zoo conservation efforts and if they are happy with the zoo's present status in his essay titled [20]. His study's primary goal was to poll zoos regarding their objectives and perceptions of visitor sentiment. Data was collected via a questionnaire as well as a zoo visitor opinion poll, followed by a trial experiment and research methodology. In order to evaluate visitor satisfaction, Hyung et al. used significance performance evaluation to assess the pertinence and performance of infrastructure and amenities characteristics [21]. In regression analysis, he finds the main factors influencing total satisfaction. Additional measures are needed to enhance the zoo habitat and animal care, as well as creating varied educational programs that reduce the zoo's quality.

The significance of viewing animals in zoos in settings that can only be maintained by human activity was explored by Sawad et al. Eco-tourism is described as the enjoyment of wildlife that promotes learning opportunities and respect of the natural environment, according to them [22]. According to Stacy et al., the goal is to teach tourists regarding species and habitats, as well as to improve wildlife care and survival via study and conservation. To evaluate visitors' perceptions of service quality, they utilized the perception-exportations or discrepancy measure and direct performance measurements. Jensen extends Herzberg's two-factor theory to the world of zoos, claiming that hygienic elements such as parking, dining, and restrooms are essential since they may negatively affect visitors' overall impression of quality.

In their review, Karanikola et al. looked at tourist's perceptions of wildlife and urban green spaces [23]. They also kept track of

zoo visitors' pleasure, distance travelled to visit the zoo, and frequency of visits. Face-to-face interviews and sample collection were used in this research investigation. According to Hamilton et al.'s study, visitors to wildlife parks and zoos come for their own interests and encounters with wild animals, which is a component of the wildlife experience [24]. In their study paper, S. Jessica et al. discuss how visitors interpret pleasure in zoo experiences. To capture people's subjectivity, the Q technique was utilized. It was more concerned with the concept of pleasure than with contentment. Mallapur et al. argue in their paper that zoos are an ideal learning environment for conveying preservation and awareness messages, and that zoos may start the process of teaching their audience by giving wildlife guides and pamphlets at the zoo's entry. In his paper, Vithiranjan gives an outline of the effect of tourism on the Indian economy. Tourism contributes to regional and economic growth. In 1980, India's government recognized the importance of ecotourism as a business.

3. DISCUSSION

The current research is a survey evaluation that incorporates both primary as well as secondary sources of data. A questionnaire utilizing the face-to-face interview technique is utilized to gather primary data. All of the information was gathered over the course of three months, in last quarter of 2018. Data was gathered from a total sample of selected participants using standardised questionnaires. A random sample of visitors was chosen at various times throughout the day. Visitors of various ages, residences, occupations, and other characteristics were carefully selected. Out of the entire sample of participants, 210 were determined to have correctly answered the majority of the questions, and were incorporated in this research. Some information for this research came from secondary sources such as Nandankanan's yearly report, widely published papers, and so on.

The questionnaire was divided into five sections. The first section contains visitor demographic information such as name, country, region, birthdate, gender, religion, education,

profession, and income level. The second section of the inquiry covers the park's whole logistics. Location, value for price, design, diversity of animals, quality of cages, viewing spaces, education and information, guide assistance, and out-sourcing facilities like boating, parking etc. are all factors to consider. The zoo's visitors' expirations are measured in the third section of the inquiry. Visitors assign rankings based on their degree of expiry. The highest ranking is one. The zoo's environmental and conservation efforts are covered in the fourth section. It expresses zoo visitors' overall happiness with animal visibility as well as their entire zoo visit experience, including the best and worst parts. The last section is for guest feedback.

A five-point likert scale of reaction, such as highly agreed, agreed, neutral, disagreed, and strongly disagreed, is used to gauge visitor satisfaction. Basic statistical techniques such as probability distribution, average, proportion, and others are used to analyze the data collected in various tables. On the grounds of the literature study and responses, one assumption is proposed: total zoo visitor pleasure is unaffected by demographic variables.

3.1. Nandankanan Zoological Park

Nandankanan Wildlife Sanctuary, also known as the Garden of Pleasure, is a major big zoo in India that is nestled within natural woods and spans 3.62 square kilometres. It was founded on December 29, 1960. Birds Aviary, Lion Safari, Boating, Bear Safari, Aquarium, Reptile Park, Amphibian Enclosure, Aerial Ropeway, and Toy Train are among the attractions available at this park. It's a great place to visit if you're interested in animals. Nandankanan has risen to prominence as a vital hub for wildlife preservation and ecological awareness. It is home to a variety of free-living species of animals as well as 120 captive animal species. It is the nation's first zoo to join the World Association of Zoos and Aquariums (WAZA) as an institutional member. It is the white tiger's home zoo. Table 1 depicts Nandankanan's visitor and revenue trends over the past ten years. Throughout this time, visitor numbers have doubled and income has quadrupled.

Table 1: Illustrates year wise number of visitors visited and the money produced by the zoo [25]

Year	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
No. of Visitors (in lakhs)	15.088	17.327	18.624	21.291	24.015	24.690	29.059	27.615	29.047	32.048
Revenue Collected (Rs.in Lakhs)	176.52	192.93	215.04	361.05	527.07	569.04	645.22	664.49	716.86	916.87

3.2. Investigation and Elucidation

Table 2 shows how the total sample responses were divided into distinct groups based on various criteria. Visitors from Odisha account for 24.55 percent of the 220 responses, while tourists from other states account for 70.45 percent. Only 5% of the population is from outside India. Male respondents make up 60.45% of the total, while female respondents make up the remainder. The majority of responders (78) are under the age

of 29. Only 13.64 percent of responders are above the age of 60. Furthermore, the majority of respondents (41.36 percent) were military members who visited the park throughout the three-month research period. This was succeeded by the student group (16.82%) and the retired group (10.00%).

Table 2: Illustrates the profile of participants

Gender	No.	Percentage	Occupation	No.	Percentage
Male	133	60.45%	Student	37	16.82%
Female	87	39.55%	Service	91	41.36%
Age Group	**No.**	**Percentage**	Business	36	16.36%
Below 29	78	35.45%	Retired	22	10.00%
30-39	48	21.82%	Housewife	34	15.45%
40-49	31	14.09%	**Residence**	**No.**	**Percentage**
50-59	33	15.00%	Within state	54	24.55%
Above 60	30	13.64%	Out of State	155	70.45%
			Out of India	11	5.00%

All of the elements that contribute to zoo tourist's pleasure are categorized into three categories: communication services, zoo visibility and variety, and other amenities. Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree were used to gauge participant's satisfaction on a 5-point likert scale. Table 3, Table 4, and Table 5 show the results of the survey.

Table 3: Illustrates visitor's satisfaction level on connectivity options

Parameters of Visitors satisfactions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Location of the Zoo is very convenient	54	114	34	18	0	220
Communication to the Zoo is easily available	32	128	21	39	0	220
Parking facilities are sufficient and save	41	76	12	86	5	220
Safari bus/battery vehicles/toy trains are sufficient & rescannable	24	45	35	92	24	220
Average	38	91	26	59	7	220
Percentage	17	41	12	27	3	100

The Zoo's connectivity options are acceptable, with fifty-eight percent of the participant's agreeing and just thirty percent disagreeing. More than seventy-five percent of the respondents are very pleased with the zoo's location and the availability of connectivity options to Nandankanan. Almost half of the respondents are dissatisfied with the Nandankanan Zoo's parking and vehicle amenities. On average, 130 people find the overall connectivity services to be acceptable, while 66 visitors find them to be unsatisfactory.

More than half of tourists are pleased with the zoo's visibility and variety of animals and birds. From the visitor's perspective, the sufficiency of animal/bird collections, the appropriateness and suitable presentation of information and the adequate confinement of animals are all evaluated. In terms of animal exhibition and viewing spaces, 45 percent of the respondents

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expressed dissatisfaction. More than 70% of visitors are pleased with the number of wildlife and birds as well as the information available. In terms of zoo visibility and animal variety, 113 of the 220 sample visitors are pleased on average.

17 percent of the sample had a neutral view on these issues because they believe these are management or administration issues that they cannot evaluate as a tourist.

Table 4: Illustrates participant's satisfaction level on zoo visibilities and varieties

Parameters of Visitors satisfactions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Collections/Varieties of animals are sufficient	54	87	43	36	0	220
Animals are properly enclosed and maintained	22	98	31	69	0	220
Display of animal information are proper and enough	34	65	32	46	43	220
Display and viewing area of animals are enough and convenient	12	76	21	85	26	220
Information and Zoo layout displays are proper and enough	34	86	65	35	0	220
Average	31	82	38	54	14	220
Percentage	14	37	17	25	6	100

The majority of tourists are pleased with the admission price, zoo staff behavior, guide services, and public information. Visitors have varied feelings about restaurants, rest areas, cafés, and other amenities. Only forty-four visitors of the entire survey expressed dissatisfaction with different satisfaction metrics. In terms of satisfaction, 28% of the sample respondents have not responded. In all, fifty-four percent of the sample participants were pleased with their Zoo visit in every way.

Table 5: Illustrates participant's satisfaction level on other facilities

Parameters of Visitors satisfactions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Other amenities like restaurants, rest place, cafes, etc. are sufficient	23	67	47	63	20	220
Education of animals/museum facilities are sufficient	21	34	143	22	0	220
Conservation activities by Zoo are sufficient	32	43	86	53	6	220
Guide services/Redressal of Public complaints are satisfactory	54	56	67	43	0	220
Zoo's employees behaviour towards visitors are satisfactory	78	96	23	23	0	220
Entry tickets/other tickets are reasonably priced	115	65	4	31	5	220
Average	54	60	62	39	5	220
Percentage	24	27	28	18	2	100
OVERALL PERCENTAGE	19	35	19	23	4	100

Many reasons affect visitors to this zoo, however for the sake of this research, all elements have been classified into eight major categories, and visitors have been asked to rank their motivations in terms of priority. A five-point likert rating is used for this, with rank 1 representing more significant elements and rank 2 representing less important ones, and so on. The visitors' assigned rank is then translated to a value by multiplying 5 by rank 1, 4 by rank 2, and so on. Table 6 illustrates how significant variables are ranked

Table 6: Illustrates the ranking motives of visiting zoological park

Motives of visiting	Rank1	Rank2	Rank3	Rank4	Rank5	Total Score	
Location of the Zoo	76	65	34	45	0	832	3RD
Logistic facilities to the Zoo	54	58	21	56	31	708	5TH
Collections/Varieties of animals	**112**	**43**	**53**	**12**	**0**	**915**	**1ST**
Amusement facilities	**97**	**54**	**43**	**26**	**0**	**882**	**2ND**
Conservation activities by Zoo	43	32	56	65	24	665	8TH
Zoo's employees behaviour	32	41	75	72	0	693	7TH
Entry tickets/other charges	43	76	44	57	0	765	4TH
Learn about animals	32	34	98	56	0	702	6TH
Average	**61**	**50**	**53**	**49**	**7**	**770**	

The collection or variety of animals is the most important element that encourages people to visit the zoo, accompanied by entertainment or enjoyable day out facilities, among the eight reasons for visiting the zoo. The least influential factors for zoo visits include conservation initiatives and zoo staff behaviour.

4. CONCLUSION

Despite its rich religious and cultural history, Odisha's natural attractions play a very little part in global tourism, despite its enormous potential for development. Zoos have long been popular meeting places for friends and families, and many individuals find psychological solace in taking in the natural environment and engaging with animals. Zoo visitors come to the zoo with a diverse set of motivations, interests, and knowledge about animal conservation and environmental problems. Nandankanan Zoo has a good payoff in terms of location, communication, parking, amusement parks, animal and bird diversity, and so on. To attract and fulfil tourist's expectations, the Zoo may place a greater focus on animal variety and visibility, cleanliness and security facilities, the conservation of unique species, and museum embellishment.

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