

The Need for Scientific Studies of Visitation Trends in Indian Zoos

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Background

Zoos are among mankind's oldest institution. Across the world zoos have brought together and displayed live, wild animals for people to look at, and over the years hundred of millions of visitors have done so. However, a drastic change in animal exhibition and management occurred in the early twentieth century, thanks to Carl Hagenbeck, a leading zoo man, animal dealer, breeder and circus owner then. He was the first in Europe to successfully recreate the animal's native habitat and to use moats instead of bars extensively. In India, the Jaipur Zoo had a moated lion enclosure that was designed by the city engineer well before Hagenbeck, but generally the zoos in the country did not start to modernise until after independence. In 1952, the then Indian Board for Wildlife (now reconstituted as the National Board for Wildlife) recommended that a modern zoo be set up at Delhi, the nation's capitol, and Hagenbeck's style played a large role in the initial design and construction.

The majority of Indian zoos are run by forest departments and municipal corporations, with a slowly growing number by corporate bodies. In principle, zoos should be able to rely on visitors to sustain and improve its standards and developments as any self-financing business does, and is done in western countries. In the west, however, governments also often give funds to purchase property and construct the zoo but then the zoo is expected to be run in a professional manner and bring in sufficient income for day-to-day costs, further development and other expenses. In India, however, the State Governments get the gate collection and provide the funds for running the zoo, irregardless of whether the gate covers the costs or not. Usually, the gate does not cover the costs and the government makes up the difference. At the same time, it is the government which insists that gate fees be kept very low so that the low-income population can visit regularly. Funds for modernization of zoological parks, (new naturalistic enclosures) and strengthening of veterinary facilities are being provided by the Central Zoo Authority, Ministry of Environment and Forests. This is the only country in the world in which the central government does so much for the zoos.

Zoo Visitors Numbers

In this article, to know the visitation trends in Indian Zoos total number of visitors of 33 zoos has been taken in to consideration to compare with the total visitors annually for a period of three years from 2001 – 2004. Apart from this, opinions of different directors were taken in explaining the decline in visitor numbers where applicable, not just for their zoo but for all the zoos which had had a decline. These opinions were "on the spot" without benefit of a systematic visitor study, but the information gleaned is useful. It is so useful in fact that one would encourage every zoo to put some effort into scientifically gathering data for analysis. On-the-spot comments can be good indicators for in-house changes but where government should act, scientifically gathered data is much more effective and sometimes a requirement for action.

Out of 33 zoos selected for this study, 20 were characterised by an increasing trend in visitor numbers; of those 20, 3 were characterised by mild fluctuation; and of the remaining 13 zoos there was a relatively significant fluctuation.

According to the reports received from all 33 zoos the total number of visitors are 2,07,61,540 in 2001-2002, 21184257 in 2002- 2003 and 22509972 in 2003-2004. When these 33 zoos are considered as samples to know the visitor numbers in India there is an increasing trend in visitor numbers in the country with an increase of 8.42% in the year 2003-04 compared to 2001-02.

The VJBUZ Zoo, Mumbai records the highest number of visitors in India. There is a steady increase in the number of visitors with a high record of 18,57,872 during 2003 -2004 and the percentage of increase is 0.233. Other zoos that showed significant increase in the visitor numbers during 2001-2004 are BBP, Bangalore, (23.66%), Sayajibaug Zoo, Vadodara (18.13%), SCZG, Mysore (16.3%), and SGB, Patna (11.2%) (Table 1). However, it can be noted that Mysore zoo and Sayajibaug zoo showed a fluctuation in between the first and the third year.

Arignar Anna Zoological Park increased their visitation by 18.82% (1.12 Lakhs) between 2001-2002 and 2002-003. However, there is a fall in the visitor number on the third year compared to second year. The Madras Crocodile Bank Trust in Mammalapuram is also showing a positive trend with an increase of 3.57%.

The Kamla Nehru Prani Sangrahalaya in Indore showed a gradual increase although the zoo is under a process of expansion and is in some disarray.

With regard to rest of the 13 zoos there is a decreasing as well as fluctuating trend in the visitor numbers in all three years. In the zoos listed in Table 1, four zoos show major fluctuation in visitor numbers. The Alipore zoo, Calcutta showed high degree of decrease with a percentage of 6.63 (1,37,778), though it showed an increase of 17.7% in 2002-2003. The Aurangabad Zoo, IGZ, Vishakhapatnam and Guwahati zoo demonstrates a decline of 16.37% (69,990), 17.23% (51007) and 11.42% (50,828) respectively (Table 1). The only zoo that showed a significant, indeed dramatic decline is Bellary Mini Zoo, Karnataka in which here was a decline of 35.8% in three years.

Views on fluctuation of visitor numbers in zoos

The authorities at Aurangabad Zoo were of the view that visitor numbers had suffered due to the absence of charismatic and exotic animals such as Giraffe, Zebra, etc., stating confidently that the indigenous Indian animals do not

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attract local visitors. Authorities opined that the cause of decline in number of zoo visitors at State Zoo at Guwahati was bad weather (heavy rainfall) during holidays in 2002-2003 which showed a decline of 11.97% (59,375) compared to 2001-2002. On the third year it showed a decline of 11.42% compared to the first year.

Officers of Bellary Mini Zoo, Karnataka believed that TV channels such as Animal Planet, National Geographic, Discovery which telecast many animal-oriented documentaries, create a desire for a higher standard than the old under-developed mini zoo is able to provide at present.

The Director, National Zoological Park, Delhi feels that decline in zoo visitor numbers during 2002-03 by a difference of 1.14 lakhs may be due to different terrorist activities in Delhi, such as attack on Parliament in December, 2001, which caused fear in the mind of visitors to gather at public places. He also felt that imposing a ban on carrying eatable items, picnicking, private vehicle inside the zoo premises has had an adverse impact on visitor numbers. However, there is an increase in the subsequent year.

There is no significant decline in the visitor numbers at Gandhi Zoological Park, Gwalior. The authorities noted, however, that the small decline in zoo visitor numbers from 1.5 lakhs in 2001-2002 to 1.44 lakhs in 2003-2004 took place as a result of competition from other tourist attractions. Water Park Sun City and other entertainment centres now attract the major part of visitors in the city. One interpretation of this information could be good news however, in that, despite the new attractions, the visitor numbers fell by only 5,971.

At Ahmedabad, visitor numbers at the zoo declined heavily by 28% in 2002-2003 (from 13.42 lakhs in 2001-02 to 9.6 lakhs in 2002-03) due to earthquake and communal riots in the city, a result that is not surprising. But subsequently in the year 2003-04 the visitation almost reached the previous high record with a difference of 34,377.

At Indira Gandhi Zoological Park, Vishakhapatnam, fewer visitors in 2003-2004 may be the result of cyclonic intermittent rains in the months of July, August and September, 2003. (The number declined from 2.95 lakhs in 2001-2002 to 2.86 lakhs in 2003-2004).

Mysore Zoo's visitation showed a decline in number in 2002-03. The Zoo Director opines that this is fallout from a general decrease in tourism in the locality, ostensibly resulting from disturbances like Cauvery agitation, abduction of prominent personalities by forest brigand Veerappan, and increase in vehicle taxes. The number of visitors reported is 13.00 lakhs in 2001-2002 as compared to 11.62 lakhs in 2002-2003, a significant deficit of 2.38 lakhs visitors.

Though there is an increasing trend in the number of visitors in Madras Crocodile Bank (MCB), the director felt that the emerging entertainment centres having joy rides and water parks had attracted visitors who otherwise might have stopped at the MCB. Just like the MCB, the Arignar Anna zoo is very far out of the city, but it has been blessed by immense improvements in public transportation from the centre of the

city and parts around, while the MCB has not. The two facilities are quite different also which could account for many differences in visitor interest though they are both near Chennai city.

Visitation and status of zoos

As goods and services become more expensive, and the population grows, it stands to reason that an exponential increase in visitation is necessary every year in any leisure facility in order to meet increasing costs.

Some zoo experts opine that even with the best will and expertise, good zoos will not remain good if all parts of the attraction are not of high standard. One may have a collection of animals which are well looked-after and well-presented (naturalistic and large enclosures) but, if visitor facilities do not also come up to the same standard, then the business will not flourish. Visitors may have enjoyed seeing animals shown in naturalistically constructed environments, but if this is followed by a visit to a dirty toilet or having to hike a long way in the hot sun to drinking water points, their memory of the zoo visit is not going to be very good. Inadequate or inconvenient visitor facilities are particularly unpleasant if visitors also have young children with them, which is usually the case. The special needs of the disabled and senior citizens must also be catered for, particularly in India where such persons are kept at home and join family outings instead of being farmed out to old folks homes. Zoo owners over the world who neglect the needs of their visitors do so at their own peril. The best zoos know this and spend as much time and energy making their toilet facilities clean, comfortable and attractive as they do restaurants and animal enclosures. For example, in Singapore Zoo, the toilet complex has been constructed in a beautiful garden setting with attractive environmental graphics on the back of the doors of individual stalls !

Today it is extremely difficult to raise sufficient funds solely by gate collection alone, particularly in India where the gate fee is extremely small and not commiserate with the amount required to run a complex organisation like a zoo. Therefore, in order to create the essential funds for providing naturalistic exhibits, housing and healthcare, planned breeding of endangered species, effective education programmes and specialized services, zoos in India need to learn how to compete aggressively and professionally with emerging entertainment facilities, such as in done in western countries and, increasingly, in Asian countries, such as Singapore, Malaysia, Indonesia, Taiwan, etc.

Successful zoos offer constantly changing attractions backed up and promoted by professional marketing of the total product. Specific campaigns are conducted to insure that gate numbers will increase, and this is done to a great extent by encouraging local people to come back every year, or more often. Staff training schemes have been designed to teach skills in communicating with visitors and making them feel close to nature and at ease. Animal adoption or sponsorship schemes provide a very useful source of revenue in many zoos in western country but very few by Indian zoos.

Indian zoos would benefit quite a lot by learning to adopt some of these practices which would better utilise their

valuable resource of a very large visitation to raise funds for improving the zoo and their contribution to *in situ* conservation. Indian zoos would also benefit by actively studying visitor trends.

Mr. Bernard Harrison, Ex Chief Executive Officer of Singapore Zoo reported that the "big attractions" in his zoo, e.g. the item(s) which kept Singaporeans coming back to the zoo year after year, in addition to foreign tourists were their dramatic visiting exhibits, such as the Golden Monkeys from China in 1987, and Giant Pandas in 1988, and Breakfast with Orangutan in 1995. Thereafter the Singapore Zoo made a point of constructing one outstanding new attraction each year. Many superb enclosures have been constructed for outstanding exhibits such as the dramatic jungle river for the Golden Lion tamarins, underwater viewing for polar bears, walk-through reptile exhibit, butterfly and bat exhibits, and the most advanced zoo development in the past few decades, the Singapore Night Safari. Singapore zoo reckons that its attendance figures increased by 25 percent with the Golden Monkeys alone. The animal shows at the Singapore Zoo with the aim of entertaining the public have also proved a big draw for the public.

Because the zoo keeps its revenue, unlike government institutions in India where the revenue is handed back to government, the revenue generated by the zoo helps to improve the zoo and also to develop conservation and education programmes. Because staff salaries are determined by the economic health of the zoo, staff also takes more interest in the fine points of the zoo looking nice and being hospitable to visitors.

Before our zoos can come out with creative efforts which will attract significantly more visitors, they need to know more certainly what visitors want and what they don't want. It is easy to make educated guesses, and some of them are at least partly correct. Educated guessing is not what gets people coming and spending money in the zoo, however. If there is a problem of declining visitation, zoos in western countries would first invest in scientific and systematic visitors studies to find out what is putting people off of the zoo. Is it a climatic or political or security development? Are people listening to animal welfare activists? Do they really have to have exotic animals, or would they be just as happy with well-exhibited and cared-for indigenous species, if it were explained to them properly? Do we really know how to educate people? Are we just giving them facts, adding to their already overloaded media-strained brain? Or do our zoos make an effort to appeal to their emotions, to see that they have fun, to develop pleasant associations with animals?

A standard visitor survey needs to be developed which would provide a way of quantifying what the nation's public values in a zoo, what they would give up, how much they would pay to have more, how often they come, why not more, etc. Then in addition to this, each locality to back up (or prove wrong) individual theories of why their numbers have decreased. Every zoo needs to test opinions generated by their own people objectively and systematically. People in Karnataka need to be asked if Veerapan scared them away from traveling, or going to the zoo, or if Discovery Channel really

replaces the sounds, and sights and smells of living animals however poor the zoo. In Chennai people need to be asked how often they visit the zoo, are they visiting less because of Water World, or whatever. Zoo managers are not sociologists so they need help with creating a valid questionnaire and instructions for survey to maintain objectivity.

One more thing. Singapore Zoo doesn't just "attract" visitors with the dramatic exhibits previously mentioned. It doesn't happen automatically with one press release or a billboard on the way to the zoo.

Singapore Zoo has a Marketing Department with a large first-class trained staff and a staggering budget. It takes expert work to get people into the zoo, or any other leisure activity . . . to get them to choose one leisure activity over another. People first have to know about it, and then become convinced to do it. Without this input of marketing, there would not be so many visitors.

In addition, Singapore Zoo doesn't just make money from visitor entry fees. Once people get to the zoo they spend mega-bucks on food (dozens of good restaurants), soft-drinks (kiosks all over the zoo), souvenirs (t-shirts, designer items, hats, umbrellas, gee-gaws for their house (costly ones), stuffed toys, books, key-chains, pencils, postcards, etc. Singapore Zoo and Singapore Night Safari might have about half a dozen gift shoppes sprinkled around, some big some small, but all pulling in money on high quality items. All this relates to visitor numbers because it is part of the total experience of the zoo. The animals are only part of the attraction. The beauty of the landscaping, its feeling of security, its ambience, its ease of performing necessary functions (getting around, going to the toilet, finding water), its food offerings, its animal shows, its tours and educational exhibit, even its gift stores make up the day at the zoo.

Indian zoos already have a huge visitation compared to many western zoos. Western zoo personnel are staggered when they hear of the numbers Indian zoos get on an ordinary day. Half the work is done simply as a result of India's population. Will Indian zoos lose visitors to Water World? To an extent yes; it is already happening, but how many people will pay Rs. 500 a pop for a day out several times a year. Harrison always stresses the economic importance of local visitors coming back over and over again. It is up to the zoos to meet the challenges of the modern world in South Asia ... more competition from leisure facilities, consequences of climate change, fall-out from terrorist and local banditry, rising petrol prices, the lot !

Hopefully with some good scientific visitor studies, some insight, willingness to change and willingness to take a risk by making dramatic changes and investments, Indian zoos will come up with appropriate visitor facilities, a variety of interesting and exciting educational programmes and attractive, stimulating designs for our animal exhibits. This

will have to be done in such a way as to attract sufficient visitors ultimately for self-sustenance of the zoos and enhancement of their contribution to genuine conservation programmes.

Table 1. Visitor numbers in 33 zoos and the fluctuation in percentage compared with the highest record of the zoo in three years

Name of zoo	2001-2002	2002-2003	2003-2004	Fluctuation* (%)
VJBUZ, Mumbai	1829099	1853550	1857872	+ 0.233
Alipore Zoo, Kolkata	1703398	2070922	1933144	- 6.65
NZP, Hyderabad	1581894	1570932	1568898	- 0.12
NZP, Delhi	1387000	1273000	1335000	- 3.89
KNPS, Ahemdabad	1342100	965573	1376477	+ 2.49
SCZG, Mysore	1300037	1162741	1512975	+ 14.07
NZP, Bhubaneshwar	1198662	1296093	1337364	+ 3.08
CSP, Guindy	929543	954591	922503	- 3.36
POZ, Lucknow	854428	933334	956569	+ 2.49
RGZP, Pune	833443	879325	959976	+ 9.17
SGB, Patna	823168	869341	979414	+ 11.2
Trivandrum Zoo	786179	1039938	1000347	- 3.80
BBP, Bangalore	686915	691935	855666	+ 23.66
Sayajibaug Zoo, Vadodara	606831	571357	718710	+ 18.43
AAZ, Vandalur, Chennai	598864	711589	700963	- 1.49
Junagarh Zoo	546522	586840	637751	+ 8.67
Guwahati Zoo	495868	436493	445040	- 11.42
Aurangabad Zoo	427000	496900	411600	- 16.37
KNPS, Indore	365825	371600	381600	+ 2.69
Kanpur Zoo	349089	356842	370771	+ 3.90
MCZ, Chandigarh	300676	243998	313612	+ 4.3
IGZ, Vishakhapatnam	295892	316899	276337	- 17.23
Udaipur Zoo	259186	231741	311606	+ 22.62
MCBT, Mamallapuram	252337	247486	261174	+ 3.57
PNHZP, Darjeling	207038	255348	256908	+ 0.61
TLS, Shimoga	185468	151986	155649	- 16.0
Ranchi Zoo, Ranchi	175923	202351	218045	+ 7.75
Gandhi Zoological Park, Gwalior	150700	150453	144729	- 3.96
GBPHZ, Nainital	78695	84632	82122	- 2.96
SVZ, Tirupati	77732	91820	103960	+ 13.22
Biological Park, Itanagar	65000	70000	80000	+ 14.28
Bellary Zoo	64628	41447	38190	- 35.86
Mini Zoo, Miao	2400	3200	5000	+ 56.2
Total visited	20761540	21184257	22509972	-
Annual % increase in 33 zoos	-	+ 2.03	+ 8.42	-

* Calculated in comparison with the highest record in three years with that of the next lowest figure

Zoo Biology egroup

Zoo Biology is a discussion, question and answer group dealing with the diverse range of Zoo Sciences. The Zoo Biology Group is concerned with all disciplines involved in the running of a Zoological Garden, Captive breeding, husbandry, cage design and construction, diets, enrichment, man management, record keeping, etc It is specifically a forum for professional Zoo Staff. The Zoo Biology Group is independent and not attached to any other group, society or organisation.

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