



## PERCEPTION AND ATTITUDE OF TOURISTS TOWARDS ECOTOURISM DEVELOPMENT AND CONSERVATION IN PORT HARCOURT ZOOLOGICAL GARDEN, PORT HARCOURT, RIVERS STATE, NIGERIA

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### ABSTRACT

*The study of the perception and attitude of tourists towards ecotourism development and conservation in Port Harcourt zoological garden was carried out in Port Harcourt, Rivers State, Nigeria. Data were collected using open and closed ended questionnaires and interview to get detailed information from the respondents. A total of one hundred and twenty (120) copies of questionnaires were administered to the tourists that visited the zoological garden. The data were analyzed using descriptive statistics of frequency and percentages and presented as tables and charts. The results revealed that the majority of the tourists (37.50%) have visited the zoological garden three times while the least number (5%) have visited five times or more. The frequency of visit showed that 37.50% of the respondents visited once in a month, 32.50% once in three months and 17.50% once in a week. The majority of the respondents (30%) visited with their family while the least number (10%) visited alone. Others (45%) visited to see animals, 30% to enjoy natural environment, 15% to enjoy the playground and 10% for project research. Gate fees according to a high percentage of the respondents (67.50%) was moderate while the least number of respondents (7.50%) was high. Most tourists (67.50%) were dissatisfied with facilities, 20% were satisfied and 12.50% were very dissatisfied. Also, 74.17% of the respondents said they will not visit the zoological garden again while 25.83% wanted to visit again. Majority of respondents (80%) said they would not recommend the garden to others while 20% were of the contrary. Most respondents (40%) revealed that inadequate facilities were the major challenges faced by the zoological garden while the least number (10%) stated that inadequate staff and visitors not complying with the zoological garden rules were the major challenges*

**Keywords:** Perception, Zoological garden, tourists, Ecotourism development, conservation

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### INTRODUCTION

The International Ecotourism Society (TIES) 2012 defines ecotourism as “Responsible travel to natural areas that conserves the environment and improves the welfare of the local people”. The success of ecotourism projects is dependent on the level of support of the host communities

known to support projects that benefits them. Ecotourism, an aspect of environment tourism makes minimal impact on the environment, empowers host communities, respects the culture of indigenous people and conserves biodiversity. It is one of the fastest growing aspect of tourism especially in developing countries where

resources are found (Magigi and Ramadhani, 2013). Besides interaction with nature especially plants and animals, it increases knowledge of the environment, and have been proved to exert healing effects on tourists (Ana and Ajewole 2011).

Some people are of the opinion that nature tourism, adventure tourism, cultural tourism, educational tourism, and historical tourism are all parts of ecotourism; others believe that ecotourism is a separate category by itself (Urias *et al.*, 2009). Ecotourism as a sub-sector of tourism is an economic sector which depends for its very existence on quality of natural environment as much as it equally does on the specific culture and society of the local inhabitants (Komla and Veirier, 2012). It is one of the world's largest growing industries with no sign of slowing down in the nearest future (Tijiani, 2007). Tourism industry generates over \$7.22 trillion of world's revenue annually and creates over 13.2% of world's employment out of which over 60 percent comes from ecotourism (World Tourism Organization, 2012). Ecotourism has widely been promoted in many countries and regions as a sustainable development tool that contributes to the dual goals of conservation of threatened ecosystems and sustainable development (Wearing & Neil, 2000; Lindsay, 2003). However, successful management of ecotourism and the success of conservation in protected areas often require local people's support for conservation which is strongly influenced by perception of the conservation impacts that are experienced by the local communities (Sekhar, 2003). Many eco-destinations have been identified and consciously advertised in Nigeria. The reason for introducing ecotourism in protected areas is mainly to generate revenue to aid biodiversity conservation and pacify host communities of eco-destinations (Ijeomah and Emodi, 2011). Some of those eco-destinations include National Parks, Game Reserves, Forest Reserves, Zoological Gardens, Waterfalls, etc. Nigeria is endowed with several resources of international ecological and touristic importance which should serve as the bases for sustainable tourism development but has not derived substantial benefits from the tourism

market. With the largest population in Africa that can sustain domestic tourism and many cultures which reflect in food and environment, Nigeria is at advantage to attract both local and international tourists and therefore derive significant benefits for national development (Ijeoma and Aiyelaja 2010).

Ecotourism is perceived differently by different groups of people, and these perceptions can either affect the progress of the Nigerian tourism industry positively or negatively. Tourism in Nigeria is faced with numerous challenges; the biodiversity components are under serious threat: high rate of poaching and habitat destruction, lack of infrastructure, sabotage, poor global image, high level of insecurity, poor road network and consistent traffic jam, poor motivation of rangers and amongst others.

However, the possible solutions to the problems of ecotourism in Nigeria include; Provision of adequate infrastructure that will support tourism such as standard hotels, electricity, good road network, boost of medical sector to make it more reliable for citizens and foreigners alike, tackling security issues within the country and bringing terrorism to a zero level. This will give a face lift to the country as a whole, even to the eyes of international media; implement policies that are in favour of development of the country and tourism particularly; and collaboration between the major stake holders (Johnson, 2001). The study is expected to broaden the scope of understanding and awareness of the tourism sector in Nigeria. The findings and recommendations of this research would enhance the forecasting abilities of government and local people to make necessary and more accurate adjustment to enhance tourism sector performance in Nigeria (Port Harcourt to be precise) as the engine of growth and development. The research work is intended to lay a good foundation for future research and also to serve as an effective measure for biodiversity conservation awareness.

## **MATERIALS AND METHODS**

### **Study Area**

The study was conducted in Port Harcourt Zoological Garden in Port Harcourt City, the capital of Rivers State, Nigeria. The zoo is a state owned zoo and was established in 1974 by Alfred Diete-spiff and was officially opened to the public on the 1st of October, 1975. The zoo is located at latitude 4°48'N and longitude 7°2'E of the equator. It is located at Trans-Amadi in Obio-Akpor local government area of Rivers State. The Port-Harcourt international airport is approximately 14miles (22.5km) North West of the zoological park. The zoo attracts large number of visitors particularly during the weekends and festive periods. It opens every day from 8am-6pm. It is a home to numerous exceptional species for example Lions, cobra, monkeys, chimpanzees, turtles, crocodiles, ostriches, gazelles, peacocks and numerous winged animal species.

The zoo is generally a lowland area with average elevation below 30 metres above sea level. Its geology comprises basically of alluvial sedimentary basin and basement complex. The climate of the zoo is tropical with distinctive wet and dry season; thus it is found in tropical rainforest zone. Rainfall is generally seasonal, variable as well as heavy and occurs between the months of March and October. The wet season peaks in July. The mean annual rainfall ranges from 1700mm to 4698mm with a temperature range of 32.2°C. Relative humidity fluctuates between 80% and 100%. The soil type in the zoological garden is both Sandy -loam, and loamy soil. The soil under the canopies of the tree species found there is rich in potassium because leaching and erosion is reduced to the barest minimum by the canopy cover.

### **Data Collection**

Data for this study was collected through primary and secondary means. The primary data was collected through administration of questionnaire

to the respondents. The questionnaire was used to get a detailed information on the study under review while the secondary data were collected from literatures, published materials and information from the internet. A total of one hundred and twenty (120) copies of questionnaire were administered and retrieved successfully from the respondents.

### **Data Analysis**

Data collected was analyzed using descriptive statistics of frequency, percentages, and presented as tables and graphs.

## **RESULTS**

### **Demographic characteristics of the tourists**

The results of the demographic characteristics of the tourists revealed that majority (67.50%) of the respondents were female while 32.50% were male. Also, the result shows that 45% of the respondents fall within age range of 18- 28 years, while 30%, 15% and 10% were for 29-38 years, 39-48 years and above 48 years respectively. The marital status was grouped into three namely single, married and divorced. And from the study, 27.50% of the respondents were single, 62.50% and 10% were married and divorced respectively. The table also shows that 25% of the respondents were Muslims, 67.50% were Christians and 7.50% were traditionalist. Also, 15% of the respondents had no formal education, while 12.50%, 40% and 32.50% had primary, secondary and tertiary education respectively. The table also shows that 7.50% of the respondents are farmers, 32.50% are business people, 37.50% are civil servants, 5% are fishermen and 17.50% are students. The household size of the respondents was grouped into four namely those less than 4, those between 4 to 6, those between 7 to 9, and those above 9. And from the study, it was shown that 25% of the respondents are less than 4, 60% are between 4 to 6, 15% are between 7 to 9 and none was above 9. The study also showed that all respondents (100%) are Nigerians. This is shown in table 1.

**Table 1: Demographic characteristics of the tourists that visited the Zoological Garden**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	39	32.50
Female	81	67.50
Total	120	100
<b>Age(Years)</b>		
18-28	54	45.00
29-38	36	30.00
39-48	18	15.00
>48	12	10.00
Total	120	100
<b>Marital Status</b>		
Single	33	27.50
Married	75	62.50
Divorced	12	10.00
Total	120	100
<b>Religion</b>		
Islam	30	25.00
Christianity	81	67.50
Traditional	9	7.50
Total	120	100
<b>Level of Education</b>		
No Formal	18	15.00
Primary	15	12.50
Secondary	48	40.00
Tertiary	39	32.50
Total	120	100
<b>Household Size</b>		
<4	30	25.00
4-6	72	60.00
7-9	18	15.00
>9	-	-
Total	120	100
<b>Nationality</b>		
Nigerian	120	100
Total	120	100
<b>Occupation</b>		
Student	21	17.50
Farmer	9	7.50
Business	39	32.50
Civil Servant	45	37.50
Fisherman	6	5.00
Total	120	100

**Table 2: Fauna Assessment at Port Harcourt Zoo**

Class	Common name	Scientific name	Number
Aves	Crowned crane	<i>Balearica pavonina</i>	1
	African hooded vulture	<i>Necrosyrtes monachus</i>	1
	Ostriches	<i>Struthio camelus</i>	2
	African peafowl	<i>Afropavo congensis</i>	1
Reptilia	Nile Crocodile	<i>Crocodylus niloticus</i>	1
	Tortoise	<i>Testudo gigantea</i>	1
	Dwarf Crocodile	<i>Osteolaemus tetraspis</i>	2
	Rock Python	<i>Python sebae</i>	1
	Monitor lizard	<i>Varanus varius</i>	1
Mammalia	Mona monkey	<i>Cercopithecus mona</i>	4
	Horse	<i>Equus caballus</i>	2
	Donkey	<i>Equus asinus</i>	2
	Lion	<i>Panthera leo</i>	1
	Rabbit	<i>Oryctolagus cuniculus</i>	3

**Number of visits made to the Zoo**

The result of the number of visits made to the Zoo revealed that majority (37.50%) of the tourists affirmed to have visited the zoo about 3 times,

32.50%, 17.50% and 7.50% claimed to have visited the zoo twice, first time, and 4 times respectively while 5% claimed to have visited the zoo 5 times or more. This is shown in table 3.

**Table 3: Number of visits made to the Zoo**

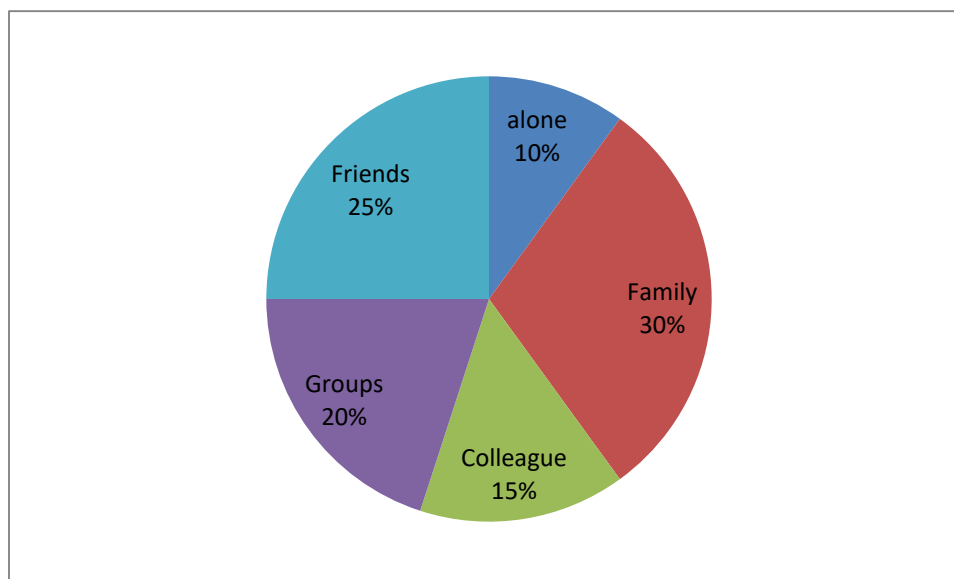
Variables	Frequency	Percentage (%)
First time	21	17.50
Twice	39	32.50
3 times	45	37.50
4 times	9	7.50
5 times or more	6	5.00
Total	120	100

**Visitation Groups**

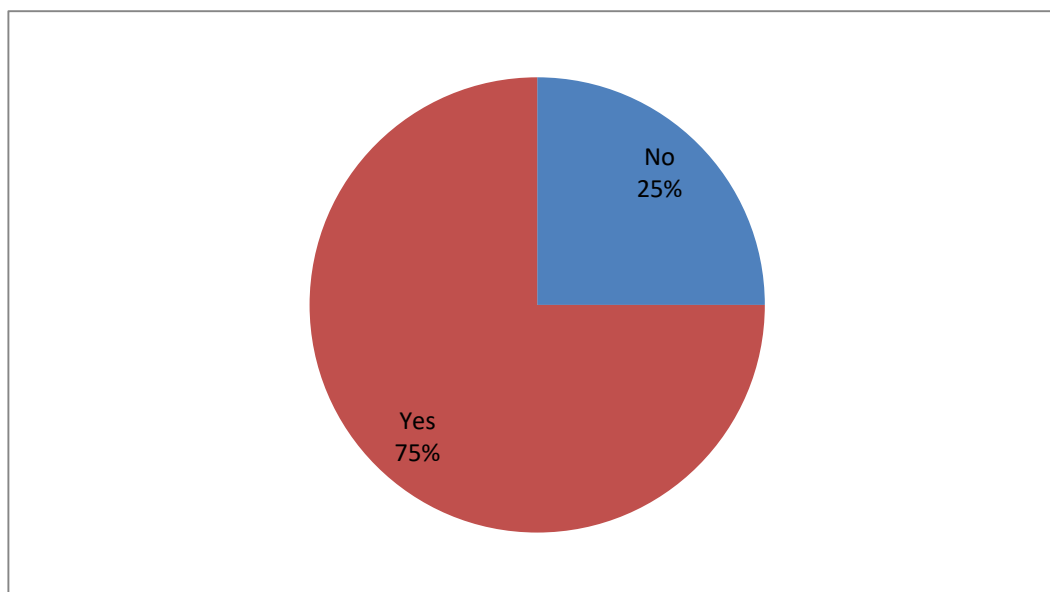
The result of the visitation groups revealed that majority (30%) of the respondents visited the zoo with their family while 25%, 20%, 15% and 10% visited the zoo with friends, groups, colleagues and alone respectively. This is shown in Figure 1.

**Presence of tour guides**

The result of the presence of tour guides revealed that majority (75%) of tourists affirmed to have a tour guide assigned to them when they visit the zoo while 25% of the respondents are of contrary opinion. This is shown in figure 2.



**Figure 1: Visitation groups**



**Figure 2: Presence of tour guides**

#### **Purpose of visits**

The results of the purpose of visits revealed that majority (45%) of the respondents claimed to visit the Zoo to see animals, 30% of the respondents claimed to visit the zoo to enjoy the beautiful scenery and natural environment, 15% and 10% affirmed it to the playground and project research respectively. This is shown in table 4.

#### **Advertisement by the zoo**

The result of the advertisement by the zoo to attract tourists revealed that majority (95%) of the respondents claimed that no advertisement is carried out by the zoo while 5% of the respondent are of contrary opinion. This is shown in table 5.

**Table 4: Purpose of visits to Zoo**

Variable	Frequency	Percentage (%)
To see animals	54	45
To enjoy natural environment	36	30
For project research	12	10
The playground	18	15
Total	120	100

**Table 5: Advertisement by the zoo**

Variables	Frequency	Percentages (%)
Yes	6	5
No	114	95
Total	120	100

**Source of Information**

The result of the source of information revealed that the majority of the respondents (45.41%) got their information about the Zoo from family/friends, 23.78% from posters, 16.76% from social media, 8.11% from radio, and 5.95% from television. This is shown in Table 6.

**Assessment of the gate fee**

The result of the assessment of the gate fee paid before entering the zoo revealed that majority (67.50%) of the respondents affirmed that the entry fee is moderate, 25% and 7.5% affirmed that the entry fee is low and high respectively while none affirmed it to be very high or too low. This is shown in table 7.

**Table 6: Source of Information**

Variable	Frequency	Percentage (%)
Family/Friends	84	45.41
Social Media	31	16.76
Television	11	5.95
Radio	15	8.11
Posters	44	23.78
Total	185	100

**Table 7: Assessment of the gate fee**

Variables	Frequency	Percentage (%)
High	9	7.50
Moderate	81	67.50
Low	30	25.00
Total	120	100

**Rating of tourists’ satisfaction with animals seen in the Zoo**

The results of the rating of tourists’ satisfaction with animals seen in the zoo revealed that the majority of the respondents (67.50%) were moderate, 25% low, and 7.50% high. This is represented in Table 8.

**Tourists rating of zoo facilities**

The results of the tourists rating of zoo facilities revealed that majority (67.50%) claimed to be dissatisfied with the visit to the zoo, 12.50% claimed to be very dissatisfied and 20% claimed to be satisfied. This is shown in table 9.

**Intention to visit the Zoo again**

The results of the Intention to visit the Zoo again revealed that the majority of the respondents (74.17%) do not intend to visit the zoo again while 25.83% intend to visit the zoo again. This is shown in Table 10.

**Recommendation of Zoo to others**

The result of the recommendation of the zoo to others revealed that majority (80%) of the respondents claimed that they would not recommend the zoo to others while 20% are of contrary opinion. This is shown in Figure 3.

**Table 8: Rating of tourists’ satisfaction with animals seen in the zoo**

Variables	Frequency	Percentage (%)
High	9	7.50
Moderate	81	67.50
Low	30	25.00
Total	120	100

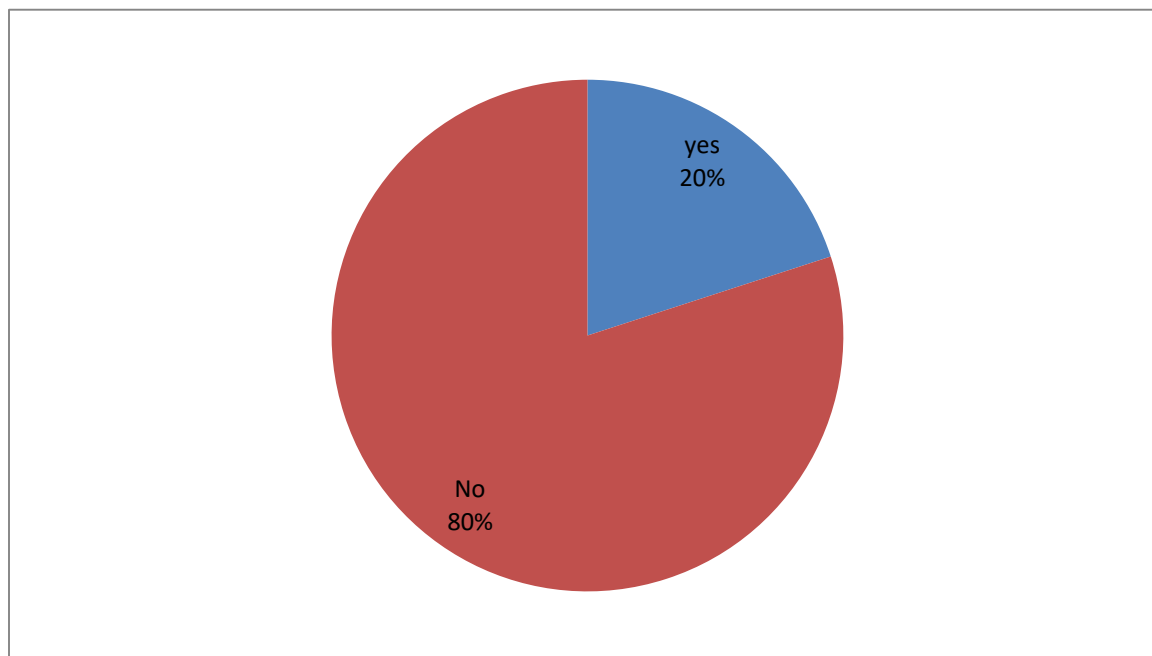
**Table 9: Tourists rating of zoo facilities**

Variables	Frequency	Percentage (%)
Satisfied	24	20
Dissatisfied	81	67.50
Very dissatisfied	15	12.50
Total	120	100

**Table 10: Intention to visit the Zoo again**

Variable	Frequency	Percentage (%)
Visit the zoo again	31	25.83
Will not visit the zoo again	89	74.17
Total	120	100





**Figure 3: Recommendation of zoo to others**

#### Frequency of visits to the zoo

The result of the frequency of visits to the zoo by the tourist revealed that majority (37.50%) of the tourists claimed to visits the zoo once in a month while 32.50%, 17.50%, 7.50% and 5% claimed to visit the Zoo once in three months, once in a week, once in six months, and once in a year respectively. This is shown in Table 11.

#### Benefits derived from the zoo by tourists.

The result of the benefits derived from the Zoo revealed that majority (67.50%) of the tourists claimed that the zoo is of Environmental benefit to them, 32.50% claimed that the zoo is of Social benefit. This is shown in Table 12.

**Table 11: Frequency of visits to the zoo**

Variables	Frequency	Percentage (%)
Once a week	21	17.50
Once in a month	45	37.50
Once in three months	39	32.50
Once in six months	9	7.50
Once in a year	6	5.00
Total	120	100

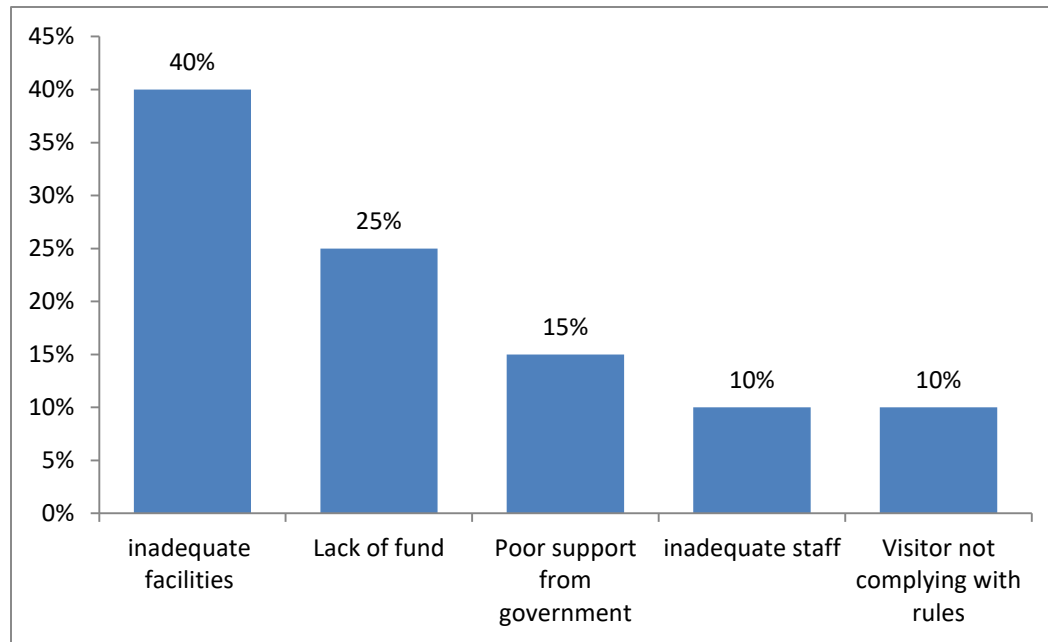
**Table 12: Benefits derived from the zoo by tourist**

Variables	Frequency	Percentage (%)
Environmental benefit	81	67.50
Social benefit	39	32.50
Total	120	100

**Challenges faced by the zoo as stated by the tourists**

The results of the challenges faced by the zoo as stated by the tourists revealed that majority (40%) of the respondents affirmed for inadequate facilities, 25% of the respondents affirmed for

lack of funds, 15% of the respondents affirmed for poor support from the government, 10% of the respondents affirmed for both inadequate staff and visitors not complying with the rules while none affirmed for poor access road. This is shown in Figure 4.



**Figure 4: Challenges faced by the zoo as stated by the tourists**

**DISCUSSION**

Most of the tourists who visited the zoological garden are between the age of 18 and 28 because at that young age, they are energetic, love to seek adventure and relax, and experience new places which can be found in the zoological garden. Visitors with the age group above 48 years old were the least because they are old, less energetic and see relaxation as a thing for the young people. In most cases ecotourism involves travelling long distances through rough roads and the old people might not have the strength to do that. This is in agreement with Kozak (2002) that elderly group prefer more relaxed experience and cannot travel long journey.

The educational status of the visitors showed that 40% had secondary education, 32.50% had tertiary education. This shows that the majority of the visitors are literate as they had secondary and

tertiary education. People that are educated tend to understand and appreciate nature, conserving wildlife and protecting the environment better than those not educated. This is in line with Dunlap *et al.* (2000); Mahutga and Smith (2011) who stated that education contributes to the expansion of human capacity in reading, communicating and being able to make a choice. Most of the visitors who visited the zoo were employed. 32.50% of them were business men and women, 37.50% were civil servants, 7.50% were farmers while 5% were fishermen. In total the employed group of visitors accounted for 82.50%. This shows that majority of the visitors could afford the trip to the zoo and have no problem paying the gate fee. This is in line with the findings of Chowdhury (2017) that most tourists belong to the employed group and very few tourists belong to the retired group.

A high percentage of the visitors revealed that they visit the zoological garden to see animals and to enjoy the natural environment. People love to see animals in their natural environment or in an environment close to their natural one. This is in agreement with the findings of Ana and Ajewole (2011) who stated that interaction with nature especially plants and animals increase knowledge of the environment. The result from the study of the tourists has showed that majority of the tourists claimed to be motivated to come to the zoo to see animals and to enjoy the beautiful scenery and natural environment, however majority of them were dissatisfied with the animals they saw and the state of the zoo facilities thus discouraging a lot of them from visiting again. These findings differ from those of Ode (2001); Okey and Ovat (2005) who asserted that the availability of tourism product and services as well as tourism destination stimulate tourism development in any country. The study further revealed that tourists affirmed to pay gate fee before entering the zoo and majority said the amount paid is moderate. The overall majority of the respondents expressed that ecotourism is beneficial to the zoo and to the host communities though the respondents view varies in their response, however 80% agrees to environmental benefits and 20% agrees to social benefits. This is

supported by Kumar Das *et al.* (2003) who opined that tourism provides host communities with huge opportunities to interact with tourists and learn about their diverse cultures. The findings further revealed that the majority of the respondents were dissatisfied with the facilities of the zoo and majority of them revealed that they would not recommend the zoo to others as the tourism potentials of the zoo has depleted rapidly.

## RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made;

1. Government should revamp the zoo through provision of adequate funds and adequate facilities for the upkeep of the animals and effective running of the zoo.
2. Government should employ more skilled staff to help checkmate the activities of the tourists and ensure they comply with the rules when they visit the zoo.
3. Tourists should be encouraged more about ecotourism values and knowledge about conservation.
4. The management of the Zoological garden should carry out advertisement using different means so that more people will be aware about the Zoological garden.

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