



Willingness to Pay for Recreational Activities in Sanda Kyarimi Zoological Park, Maiduguri Borno State

Usman Mohammed Usman

Department of Business Administration and Management, Federal Polytechnic, Monguno Borno State, Nigeria

Abstract: This study is aimed at assessing the willingness to pay for recreational activities in Sanda Kyarimi Zoological Park, Maiduguri Borno State. The study's focus was on assessing the socioeconomic characteristics of respondents, understanding the factors influencing their willingness to pay for recreational activities as well as the amount that visitors are willing to pay for an improved recreational activities in Sanda Kyarimi Zoological Park. This study used Primary data. Primary data was obtained from the tourists using questionnaire. The population of this study comprises of all the tourists of Sanda Kyarimi Zoological park. The sample method that was adopted in this study is simple random technique to select sample. Using this method, the study applied the formula for determining the size by in order to determine the sample size of this study. To determine the sample size that is large enough to generate an estimated WTP value that is chose to the true WTP, the study adopt Mitchel and Carson (1989) formula. The analysis of the socioeconomic characteristics of respondents reveals a predominantly male group with an average age of about 34 years. Most respondents have achieved at least a diploma, with a significant proportion being self-employed and having an average household size of 6.65. Income distribution is varied, with the majority earning between ₦0-₦50,000. Attitudinal data indicates that respondents view recreational activities as important, valuing benefits such as relaxation and nature walks, and are aware of outdated equipment in zoological parks. Probit regression results show that each visitor is willing to pay approximately ₦1,924.20 towards the conservation of Sanda Kyarimi Zoological Park positively influenced by being male, older age, higher education, larger household size, and higher income levels. House ownership also positively affects willingness to pay, while house rent does not significantly influence it. To enhance visitor engagement and support for the conservation of Sanda Kyarimi Zoological Park, it is recommended that the park implement targeted outreach and educational programs that emphasize the significant benefits of conservation efforts, such as relaxation and nature experiences. Given that visitors show a willingness to pay approximately ₦1,924.20, increasing awareness about the importance of park upkeep and the impact of their contributions could further boost financial support. Additionally, addressing the current issues with outdated equipment and improving the overall visitor experience can encourage more contributions and increase public enthusiasm for conservation initiatives.

Keywords: Ecotourism, Public Parks, Tourism Revenue and Visitor Satisfaction

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1.0 Introduction

A park is established primarily to show wild animals that exist. Majority of urban residents do not have the chance to visit national parks or game reserves which are generally located some kilometers away from our towns and cities. The establishment of parks awakens interests and appreciation in nature and solidifies the co-existence between man and wild animals (Ayodele et al., 2018). A park is also a center of relaxation and entertainment that can give opportunities for people to satisfy their human curiosities in seeing different species of animals at a close range. This also enlighten and create consciousness of the public in the need for conservation and natural resources sustainability in breeding of endangered species in captivity. Parks have aesthetic values which would induce repetitive visits and generation of income from gate fees. Educational research on the inmates on aspects of comparative anatomy, pathology, behaviors and reproduction are also easily undertaken.

According to the World Conservation Strategy, parks possess and manage collections that primarily consist of wild non-domesticated animals of one or more species that are housed so that they are easier to see and to study than in nature (International Treaty on Conservation, 2004). Parks serves for conservation which is the management of human use of the biosphere so that it may yield the greatest sustainable benefit to the present generation while maintaining the potential to meet the needs and aspirations of future generations (Allen, 1980). Wildlife Conservation is the practice of protecting endangered plant and animal species and their habitat. Basically there are two major systems of conserving biological resources which are in-situ and ex-situ. The In-situ conservation system is conservation of biological resources within its habitat such as establishment of protected areas (National Park, Game Reserves, and Nature Reserves). Ex-situ conservation system is carried out outside the natural environment such as zoological and botanical gardens and seed banks so as to supplement the conservation of biodiversity within the natural environment (McNeely et. al., 1990).

The aim of establishing parks lies in the importance of tourism, sustaining vanishing species, educating human societies on wildlife, advances in human medicine, ecological principles in conservation, provision of employment opportunities and income generation (ITC, 2004). There are problems in managing captive animals and the intending viewers. These includes feeding in terms of quality, quantity timeliness and control of viewers, especially children.

Before the advent of the oil boom in 70`s the entire country`s internally generated revenue (IGR) was agro based. Despite of the above, the zoo has series of problems mitigating improvement and enhancement of its revenue to the development of Borno state. The zoo infrastructures are dilapidated and requires a lot for renovation. The size of the zoo in terms of land mass is now not adequate for present-day operations, the machines of the amusement park are aged and outdated, likewise, lack of proper accounting manual and framework for revenue collection are not in place, the wild animal population has drastically reduced due to management problems and extraction the reduction the size of the animals of the animal population has made low patronage and hence reduced revenue. The decade-long insurgency crises in the north eastern sub-region have created a lot of problems of maintaining buffer stock

Like other environmental resources and public goods, national parks derive so many benefits to society in different ways. These parks perform not limited to ecological functions but also provides recreational facilities to those who visit these parks. Recreational centers also help enhance precious foreign exchange earnings to national exchequers and likewise, serves as an income to state and local levels. Borno State is very deficient in forest resources as less than 5% of its area is under forests and there are only few parks in the Borno State. These parks are, however, threatened by various activities like soil erosion, and human settlement inside the parks, pollution created by the visitors inside the parks as well as encroachment by local dwellers. Thus, the overall negative and undesirable impact caused by one or another reason may be associated with insufficient funding for managing these parks. Sanda Kyarimi Park is one of the local parks and zoo located in the center city of Maiduguri, people far and wide visit the zoo and park almost on daily basis.

Despite these challenges, efforts have been made at both state and national for smooth management of those recreational centers. Each year, the government use to allocate budget for management of these recreational centers of which Sanda Kyarimi Zoo is not an exemption. Therefore, the other alternatives can be used to generate more and more revenues for park management. At present a very low entry fee is charged and entry into the zoological parks is almost free. Charging entry fees into these zoos can therefore generate sufficient funds by enquiring the willingness to pay for such activities. There are many studies that assesses the willingness to pay for recreational activities (example, Imma, 2015; Emma 2019) though, to this study delimited the study area to Sanda Kyarimi Zoological park. Therefore, the study is sought to examine the willingness to pay for recreational activities in Sanda Kyarimi Zoological park, Maiduguri Borno State. The main objective of this study is to estimate willingness to pay for recreational activities in Sanda Kyarimi Zoological park, Maiduguri Borno State. Meanwhile, the specific objectives of the study are to; determine Socio-economic characteristic of visitors in Sanda Kyarimi zoological park, determine factors that influence visitors' willingness to pay for the conservation of Sanda Kyarimi zoological park, estimate the willingness to pay for Sanda Kyarimi zoological park. Zoo management would gain insights into which recreational activities visitors are willing to pay for. This information can guide their decision-making on where to invest sources for activity improvements. understanding the preference of resident and visitors can help the local government allocate resources effectively and prioritize projects that align with public interest. The study would lead to enhanced recreational experiences that cater to visitor's preferences, potentially increasing their satisfaction and encouraging repeat visits.

2.0 Methodology

The Sanda Syarimi Park is located within the Metropolis of Maiduguri along Shehu Laminu way. It was established in the year 1970 as a neem plantation and serves as a picnic and relaxation area and named after the former Nigerian head of state General Yakubu Gowon by the defunct Northeastern state government to promote adequate knowledge of wildlife. Recreation and ecological tourism, enhance wildlife research and development as a major revenue source to the

government few wild animals and birds donated by traditional rulers, individuals and those confiscated by wildlife protection staff of the government were kept in captivity in the plantation. In the year 1974, the president of Kenya visited the state and donated a large consignment of wild animals from East Africa to the state and the area was called a zoo. In 1976, General Murtala Mohammed named the zoo as Sanda Kyarimi Park to immortalize the late Shehu of Borno, His Royal Highness Shehu Mustafa Kyari Elkanemi. It is opposite to the Borno Radio Television Cooperation (B.R.T.V) and adjacent to it are the Open Air Theatre/Museum and Amusement Park. It covers an area of 17 hectares and houses many animal species of great beauty and serves as recreational center for people especially during festivities. Digitaria spp. among others. The park is drained by River Ngadabul which passes through the park.

This study used Primary data. Primary data was obtained from the tourists using questionnaire. The study was used to assess the socio-economic characteristic of visitors in Sanda Kyarimi zoological park, determine factors that influence visitors' willingness to pay for the conservation of Sanda Kyarimi zoological park and estimate the willingness to pay for Sanda Kyarimi zoological park. The population of this study comprises of all the tourists of Sanda Kyarimi Zoological park. The sample method that was adopted in this study is simple random technique to select sample. Using this method, the study applied the formula for determining the size by in order to determine the sample size of this study. To determine the sample size that is large enough to generate an estimated WTP value that is chose to the true WTP, the study adopt Mitchel and Carson (1989) formula.

The Sample size by Mitchel and Carson (1989) can be determined from the below formula

$$N = \left[\frac{Z\tilde{V}}{\Delta} \right]^2 \dots\dots\dots 3.1$$

Where

N = required sample size,

Z = Confident level (*t* = student's *t*-variate = 1.96 meaning 95% of confident interval)

\tilde{V} = Coefficient variation = 2.0

Δ = percentage difference between the true population mean WTP and sample estimate

$$N = \left[\frac{1.96 * 2.0}{0.2} \right]^2 \dots\dots\dots 3.2$$

$$N = 402$$

This study adopt the administration of questionnaire. The questionnaire was administered to the visitors of Sanda Kyarimi Park, Zoo.

The model will assess the factors influencing willingness to pay and likewise estimation of WTP. + The demand function was formed in a linear function to be more operational, thus:

$$Y = \dots\dots\dots (3.2)$$

$$Z = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n \dots \dots \dots (3.3)$$

The model is explicitly expressed as thus;

$$Y = \frac{1}{1 + \exp^{-(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_{16} X_{16} + e)}} \dots \dots (3.4)$$

Where;

Y = Responses on willing to pay for Sanda Kyarimi zoological park;

β_0 = constant term;

$\beta_1 - \beta_{12}$ = Parameters to be estimated;

X_1 = Gender of the respondents

X_2 = Age category of the respondents

X_3 = Marital Status of respondents

X_4 = Age of the respondents

X_5 = Educational Level

X_6 = Mode of visitation

X_7 = Employment level

X_8 = Monthly income

X_9 = Sponsor

X_{10} = Connection charge

X_{11} = Initial Bid

X_{12} = Higher Bid

X_{13} = Lower Bid

X_{14} = Maximum willingness to pay

Based on this formulation, the respective willingness to pay equation (WTP) is

$$WTP = f(X_i)$$

Where X_i = vector of independent variables. The model is explicitly expressed as;

$$P_i = E(Y = 1) = \frac{1}{1 + \exp^{-(\beta_0 + \beta_i X_i)}}$$

Where P_i = probability that $Y_i = 1$ (WTP for Sanda Kyarimi zoological park)

X_i = independent variables

Y = dependents variable (either 1 or 0 i.e., yes or no response)

θ_0 = intercept

θ_i = coefficient of the WTP for Sanda Kyarimi zoological park

the natural log of the above equation was written as;

$$Li = \ln \left[\frac{Pi}{1-Pi} \right] = \theta_0 + \theta_i X_i$$

Base on the formula above, the mean WTP was calculated using this formula;

$$\text{Mean WTP} = \frac{\ln(1 + e^{\beta_0 + \beta_i X_i})}{-\beta_i}$$

3.0 Results

Table 3.1: Socioeconomic Characteristics of Respondents

Variables	Frequency(%)
Gender	
Male	320 (79.6)
Female	82 (20.4)
Mean Age	33.94
Education	
Never been to School	49 (12.2)
Primary School	474 (10.9)
Secondary School	49 (12.2)
Diploma	122 (30.3)
University	95 (23.6)
Qur'an	43 (10.7)
Occupation	
Government Worker	90 (22.4)
Private Sector	63 (15.7)
Pension	11 (2.7)
Self Employed	181 (45.0)
Housewife	12 (3.0)
Unemployed	45 (11.2)
Mean Households Size	6.65
Mean Households members age more 18	0.67
Mean Income of Households members age more 18	42705.47
Income Category	
₦0-₦50000	161 (40)
₦51000-₦100000	139 (34.6)
₦101000-₦150000	24 (6.0)
₦151000-₦200000	53 (13.2)
₦200000 and Above	25 (6.2)
Marital Status	
Single	29 (7.2)
Married	316 (78.6)
Widow	33 (8.2)
Divorced	24 (6.0)

The socioeconomic characteristics of the respondents reveal a predominantly male population, with 79.6% of respondents identifying as male and 20.4% as female. The average age of respondents is 33.94 years, indicating a group that is generally in their mid-thirties. In terms of education, a diverse range is observed: 12.2% of respondents have never attended school, 10.9% have completed primary education, 12.2% have a secondary school education, 30.3% hold a diploma, 23.6% have a university degree, and 10.7% have received education through the Qur'an. Occupationally, the largest group of respondents is self-employed, accounting for 45.0% of the sample. Government workers represent 22.4%, private sector employees make up 15.7%, and smaller proportions are either pensioners (2.7%), housewives (3.0%), or unemployed (11.2%). The mean household size among respondents is 6.65 members, with an average of 0.67 members being over 18 years old. The average income for household members over 18 is ₦42,705.47. Income distribution shows that 40% of respondents fall within the ₦0-₦50,000 category, 34.6% earn between ₦51,000-₦100,000, 6.0% earn ₦101,000-₦150,000, 13.2% earn ₦151,000-₦200,000, and 6.2% earn ₦200,000 and above. Regarding marital status, the majority (78.6%) are married, while 7.2% are single, 8.2% are widowed, and 6.0% are divorced.

Table 3.2 Attitude and Opinion on Recreational Activities

Question	Response Option	Frequency	Percentage (%)
Importance of Recreational Activities	Yes, very important	230	57.2%
	Yes, rather important	120	29.9%
	No, not very important	40	10.0%
	No, not important at all	12	3.0%
Importance of Major Benefits of Recreational Activities	a. Relaxation	180	-
	b. Sightseeing	150	-
	c. Nature walk	170	-
	d. Games	130	-
	e. Learn about the ecosystem	160	-
	f. Others	80	-
Awareness of Recreational Center Conditions	a. Some equipment in the zoological parks are outdated and require more management intervention	300	74.6%
	b. Increase in the standard of zoo equipment will increase the price of entrance at the gate	250	62.2%

A significant majority of respondents view recreational activities as important, with 57.2% considering them "very important" and 29.9% seeing them as "rather important." Only a small portion of the respondents downplay their importance, with 10.0% stating they are "not very important" and 3.0% considering them "not important at all." Respondents identified several key benefits of recreational activities, although specific percentages are not provided. The most frequently mentioned benefits include relaxation (noted by 180 respondents), nature walks (170 respondents), learning about the ecosystem (160 respondents), sightseeing (150 respondents),

and games (130 respondents). Additionally, 80 respondents mentioned other unspecified benefits. Regarding the conditions of recreational centers, a substantial 74.6% of respondents are aware that some equipment in zoological parks is outdated and in need of more management intervention. Furthermore, 62.2% believe that increasing the standard of zoo equipment would lead to higher entrance fees at the gate.

Table 3.3: Probit Regression on Factors Influencing visitors’ willingness to pay for the conservation of Sanda Kyarimi zoological park

Parameters	Delta-method			P-value	95% conf. interval	
	dy/dx	Std. Err.	Z		Lower	Upper
Initial bid	-0.0003	0.0000	-7.62***	0.000	-0.0003	-0.0002
Gender						
Male	0.2224	0.0791	2.81***	0.005	0.0672	0.3776
Age Category						
Greater ≥ 41	0.1526	0.0498	3.06***	0.002	0.0549	0.2504
Higher Edu						
Yes	0.1394	0.0380	3.66***	0.000	0.0648	0.2140
Employment						
Employed	-0.0816	0.0834	-0.98	0.328	-0.2451	0.0818
Households size	0.0197	0.0065	3.04***	0.002	0.0070	0.0325
Income Category						
51000–100000	0.0940	0.0483	1.95*	0.052	-0.0006	0.1888
101000–150000	0.2392	0.0771	3.10***	0.002	0.0880	0.3905
151000–200000	0.0896	0.0595	1.51	0.132	-0.0270	0.2062
200000 & above	0.2157	0.0786	2.74***	0.006	0.0615	0.3699
House Ownership						
Owner	0.2197	0.1241	1.77**	0.077	-0.0235	0.4630
House Rent	1.58e-06	1.46e-06	1.08	0.278	-1.28e-06	4.44e-06
No Room	0.0279	0.0148	1.89*	0.059	-0.0010	0.0569
Duration	0.0053	0.0029	1.80**	0.071	-0.0004	0.0111

Note, *, **, *** denote Significant at 5%, 10% and 1%

Note: dy/dx for factor levels is the discrete change from the base level

The probit regression analysis on the factors influencing visitors’ willingness to pay for the conservation of Sanda Kyarimi zoological park reveals several significant findings. The initial bid negatively affects willingness to pay, with a marginal effect of -0.0003, and this relationship is highly significant ($p < 0.001$), indicating that as the initial bid increases, the likelihood of visitors being willing to pay decreases. The model estimate represents the predicted or estimated visitors’ willingness to pay for the conservation of Sanda Kyarimi zoological park. In this context, the estimated amount is ₦1,924.2. This suggests that, on average, each visitors are willing to pay around ₦1,924.2 for the conservation of Sanda Kyarimi zoological park

Gender is another significant factor, with males more likely to pay for conservation efforts, as shown by a positive marginal effect of 0.2224 ($p = 0.005$). Age also plays a significant role, particularly for those aged 41 and above, who demonstrate a higher likelihood of willingness to pay, with a marginal effect of 0.1526 ($p = 0.002$). Higher education significantly increases the likelihood of willingness to pay, with a marginal effect of 0.1394 ($p < 0.001$), suggesting that more

educated individuals are more supportive of conservation efforts. In contrast, employment status does not significantly influence willingness to pay, as indicated by the marginal effect of -0.0816 ($p = 0.328$). Household size positively affects willingness to pay, with a marginal effect of 0.0197 ($p = 0.002$), indicating that larger households are more inclined to contribute to conservation.

Income levels also show varying degrees of influence on willingness to pay. For instance, those with an income between ₦51,000 and ₦100,000 have a marginally significant positive effect of 0.0940 ($p = 0.052$). A more substantial impact is observed in the income category between ₦101,000 and ₦150,000, which shows a significant positive effect of 0.2392 ($p = 0.002$). Similarly, respondents with an income above ₦200,000 are significantly more likely to be willing to pay, with a marginal effect of 0.2157 ($p = 0.006$). House ownership also emerges as a significant factor, with homeowners showing a higher likelihood of willingness to pay, reflected by a marginal effect of 0.2197 ($p = 0.077$). Although house rent does not significantly affect willingness to pay, the number of rooms and the duration of stay show marginal significance, indicating a potential influence on the decision to support conservation efforts.

Previous studies have consistently supported the influence of gender and age on the willingness to pay for conservation efforts. For instance, Lindsey *et al.* (2013) found that males are often more willing to financially support wildlife conservation in Africa, which aligns with the finding that being male positively influences the likelihood of paying for conservation. Similarly, Tisdell and Wilson (2003) observed that men are generally more inclined to contribute to conservation causes. In terms of age, research by Stern (2008) and Kotchen and Reiling (2000) indicates that older individuals, particularly those aged 41 and above, are more likely to support and pay for environmental conservation, supporting the positive effect of age on willingness to pay observed in the analysis. The role of education and income in influencing willingness to pay for conservation has also been well-documented. Casey *et al.* (2008) and Loomis and Larson (1994) found that individuals with higher education levels are more likely to recognize the importance of environmental conservation and are therefore more willing to pay for it. This is consistent with the finding that higher education significantly increases the likelihood of willingness to pay for conservation efforts. Additionally, studies like those by Jacobsen and Hanley (2009) have shown that higher income levels correlate with a greater willingness to pay for environmental goods, which supports the positive relationship between income and willingness to pay identified in the analysis.

Conclusion

The analysis of the socioeconomic characteristics of respondents reveals a predominantly male group with an average age of about 34 years. Most respondents have achieved at least a diploma, with a significant proportion being self-employed and having an average household size of 6.65. Income distribution is varied, with the majority earning between ₦0-₦50,000. Attitudinal data indicates that respondents view recreational activities as important, valuing benefits such as relaxation and nature walks, and are aware of outdated equipment in zoological parks. Probit regression results show that each visitor is willing to pay approximately ₦1,924.20 towards the conservation of Sanda Kyarimi Zoological Park positively influenced by being male, older age,

higher education, larger household size, and higher income levels. House ownership also positively affects willingness to pay, while house rent does not significantly influence it. To enhance visitor engagement and support for the conservation of Sanda Kyarimi Zoological Park, it is recommended that the park implement targeted outreach and educational programs that emphasize the significant benefits of conservation efforts, such as relaxation and nature experiences. Given that visitors show a willingness to pay approximately ₦1,924.20, increasing awareness about the importance of park upkeep and the impact of their contributions could further boost financial support. Additionally, addressing the current issues with outdated equipment and improving the overall visitor experience can encourage more contributions and increase public enthusiasm for conservation initiatives.

REFERENCE

- Ayodele et. al., (1999) Management of zoos in Nigeria: issues and prospects, Nigeria journal of advance research in education. Vol.3. No 1, 35-39.
- Ajayi, o., and Ayodele I. A., (2009) Evaluation of ecotourism's sensitivity towards environmental impact in selected ecotourism destinations in Edo state, Nigeria
- Henry Ijeomah (2009) Tourism management and sustainable resource utilization in panda wildlife park of plateau State, Nigeria.
- Ajayi O. O., Bello Y. O and Ayodele I. A (2017) Zoo tourism in Nigeria; Ogba zoo and natural park perspective. Journal of Hospitality, Leisure and tourism. Volume 1, No 2. Pp93 -109 Edo State, Nigeria
- Allen G. R., (1980) Global conservation strategy by the united nations environment program, the world wildlife fund, and the international union for conservation.
- McNeely et.al., (1990) International union for conservation of nature and natural resource, World Resources institute, Conservation international, wildlife fund – us and the world bank –T. P includes bibliographical reference (p. 157-183)
- Adetola B.O. and Oluleye A.O. (2014). Visitors' Profile and Perception of Zoo Environment towards Conservation. A case study: University of Ibadan and Obafemi Awolowo University Zoological Gardens, South Western Nigeria. *Students' Conference of the*.
- Alarape A.A Yager, G.O AND Salman, K.K (2015). Assessment of tourist's satisfaction and perception in Makurdi zoological Garden, Benue State, Nigeria. Journal of research in forestry, wildlife and environmental 7 (1): 1-12.
- Elsie R., Andrew N., and Nicole E. (2006). A Willingness to Pay Study for Park Fees: Quill/Boven National Park and St Eustatius Marine Park, St Eustatius, Netherlands Antilles. Pp 1-29. Available on line at : www.statiapark.org Accessed on March, 17th 2016.
- Investment tax credit (2004). management of recreational facilities at Sanda Kyarimi creational center Maiduguri Borno State, Nigeria
- Pablo A. M., Marta N. G and Oscar G. B (2017) Tourists' willingness to pay for an accommodation: The effect of ewom and internal reference price. International journal of Hospitality Management 62:67-77
- Abrate, G., and Veglia, G (2016). Strategic and tactical price decision in hotel revenue management. Tourism Management, 55, 123-132.
- AZA (2018) Accreditation commission grants accreditation to 19 world-class facilities During spring 2018 review cycle.

- Beardsworth, A. and A Bryman (2001) The wild animal in late modernity: The case of the Disneyfication of zoos tourist studies 2001;1;83 *department of social science, Loughborough university LE113TU, United Kingdom.*
- Mannell R.C (2005). Evaluation of cross-culture analysis in the study of leisure. Commentary on "culture, self- construal, and leisure theory and practice." *Journal pf leisure research*, 37, 100-331.
- Hutchison J. and Dalziel J.M (1963) Ecological sustainability of detar (*detarium senegalense* J.F Gmel) in Togo (West African).
- Gray D. E and Greben S. (1974) Future perspectives," *parks and recreation* (vol.9, No. 6, 1994): 26-33, 47-56. step-by-step solution.
- Zuzarek, J (1977) *Leisure trends and the economics of the arts.* LSA, London: Leisure Studies Association.
- Jensen, Mbn. A (1977) Stage of small-group development revisited. *Group and organization studies* 2(4),419-427.
- Cordes, K. and Ibrahim, H. (1966), *Leisure and recreational activities of tourist at Kakum National Park journal on leisure research.*
- Foster, D. (1985) *Travel and tourism management*
- Desvousges W.H., Johnson F.R., Dunford R.W., Boyle K.J., Hudson S.P., and Wilson N., (1993) Measuring natural resource damages with contingent valuation: tests of validity and reliability. In: Hausman J.A editor. *Contingent valuation: a critical assessment*, Amsterdam: North Holland: 91-159
- Samuelson, P. and Nordhaus, W.D. (1990) *Climate change: the ultimate: challenge for economics*, 14th edn. New York; McGraw-Hill.
- Pearce, D. and Turner R. (1990) *Economics of natural resources and the environment.* Baltimore: Johns Hopkins University press.
- Kristom B (1990) A non- parametric approach to the estimation of welfare measure in discrete response valuation studies. *Land Economics*, 66(2) (1990), pp.135-139
- Davis LS. and Johnson, KN. (1987) current utilization and further development of the palmyra palm (*Borassus flabellifer* L., *Arecaceae*) in india.
- Hufschmidt et al., (1987) in cooperating new environmental information in natural resource policy making.
- Haab T.C and McConnell K. E (2002) Economic valuation of forest conserved by local community for carbon sequestration.
- Garrod Guy and Ken Willis (1999) Economic valuation of the Environment: Method and case studies. *Environmantal and Resource Economics*, 2002, volume 21, issues page 1 – 102, *Dominic moran (d; moran@ed.sac.ac.uk)*
- Bateman I.J and Turner R.K (1992) *Valuation of the environment, method and techniques: the contingent valuation method.*
- Hoteling's H. (1996) Application of hoteling rule for analyzing utilization pattern of Non-Renewable resources in India through on ONGC.
- Wood S.E and Trice A. H (1958) Measurement of recreational benefit," *Land Economics*, University of Wisconsin press vol.34(3) pages 195-207.
- M.Clawson and Knetsch J.L (1959) Impact of aggregation on the estimation of outdoor recreation demand functions.

- Smith V. K, H.Desvousges, and Fisher A. (1986) A comparison of direct and indirect method for estimating environmental benefits.
- Caulkins P.P, Bishop R.C, and Bouwes N.W (1986) The travel cost model for lake recreation: a comparison of two methods for incorporating site quality and substitution effect.
- Kling L. Catherine (1988) The reliability of estimates of environmental benefits from recreation demand models.
- Sobari P. (2006) Optimal fisheries resource allocation at the waters of palabuhanratus bay: demersal fisheries resource.
- Circacy-Wantrup S.V (1947) Capital returns from soil conservation practices *journal of Farm Economics*, 29 (1947), pp.1181-1196
- Hanemman W. Michael (1994) Valuing the environment through contingent valuation, *journal of economic perspectives, american Economic Association, volume 8(4) pages 19 – 43 (Handle: RePEc:jecper:v:8:y:1994:i:4:p: 19-43)*
- M.W. Hamemann (1984) Welfare evaluations in contingent valuation experiments with discrete responses *American journal of Agricultural Economic*, 66 (1984), pp332-341.
- M.W. Hamemann (1985) Some issues in continuous and discrete response contingent valuation studies *Northeastern journal of Agricultural and Resource Economics*, 14 (1985), pp 5 -13
- Davis R. K. (1963) The value of outdoor recreation an economic study of maine wood. Harvard University, Cambridge.
- Krutilla V. John (1967) Conservation reconsidered. *The American Economic review*, 57,777-786 research journal.
- Martin F. and Icek A. (1967) Attitudinal and normative variables as predictors of specific behaviors. *Journal of personality and social psychology*, 27(1), 41-57
- Doswell W.M, Braxter B.J, Cha E., Kim K., and Kevin H. (2011) Exploration Social, Environmental and familial influences on the sexual health practices of urban African American adolescents.
- Azjen, Icek; Madden & Thomas, (1986) Perceived behavioral control in reasoned action theory: A Dual aspect interpretation.
- Eagly A. E and Chaiken S. (1995) Attitude strength, attitude structure and resistance to change.in R. petty and J.k krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 413-432).Mahwah, NJ: Lawrence Erlbaum associates.
- Pinder Craig C and P. G Latham (2000) *Work motivation theory and research at the dawn of the twenty-first century*.
- Bagozzi, Richard P. and Yi Youjae (1992) On the use of structural equation models in experimental design. *journal of marketing research*, 26, 271-284.
- V. Venkatesh, Morris G.M, D. F Gordon, and D. D. Fred, (2003) User acceptance of information technology: toward a unified view.
- Afonso et al., (2012) An analysis of theory of acceptance and use of technology theory (UTAUT): Acceptance of electronic management system (EDMS)
- B. Sezer and R. Yilmaz., (2019) Learning management system acceptance scale (LMSAS): A validity and reliability study.
- Curtis L.;Edwards, C.; Fraser, K. L.; Gudelsky, S.; Holmquist, J.; Thornton, K.; Sweetser, K. D. (2010) modelling the adoption of social media by nonprofit organization.

- Kim et al. (2016) Effects of corporate social responsibility and internal marketing on organizational commitment and turnover intentions.
- Mitchell R.C and Carson R.T (1989) Estimating the outdoor recreational value of lavizan jungle park of Tehran using contingent valuation method (CVM).
- Mitchell R.C and Carson R.T (1989) Using surveys to value public goods: the contingent valuation method. Washington, DC: Resource for the future.
- Niklitschek M. and J. Leon (1996) Combining intended demand and Yes/No responses in the estimation of contingent models. *Journal of Environmental Economics and management*,31 (1996), pp. 387-402.
- Fauzi A.R., Hazrul A., Nazahiyah S.T and Muhammas S.J (2006) Performance of multivariate time series on forecasting the tropospheric ozone. *Polish journal of Environmental studies* 30 (6)
- Kraus R.G (1984) *Recreational and leisure in modern society* (3rd ed.) Glenview, IL: Scott, foresman research journal
- P. Morano and F Tajani (2014) Concession and lease or sale? A model for the enhancement of public properties in disuse or underutilized *WSEAS Transaction on business and Economics*, 11 (74) (2004)