# GREEN AREAS AND OUTDOOR RECREATIONAL CENTRES IN IBADAN, NIGERIA: AN APPRAISAL

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# 6 ABSTRACT

Aim: To investigate outdoor recreational potentials and constraints in relation to forestry in five
 recreational sites within Ibadan metropolis, Nigeria.

9 **Study design:** The survey was purposively conducted in five (5) locations based on recreational potentials associated with forests and other green environments.

Place and Duration of study: Bower's Tower; UI Zoological Gardens; Polo Club; Trans Amusement
 Park and Agodi Gardens between January and February, 2019

13 **Methodology:** Total enumeration of visitors who patronized the recreation sites during the course of the

14 study was carried out. Structured questionnaires focused on demographic and perception of visitors on

15 benefits and problems of the green recreational centres were sought. In all, 160 respondents were

interviewed. The data collected were analyzed using descriptive statistics and chi-square to test for association between the demographic factors of respondents and their perceptions towards the benefits

18 of green areas.

**Results:** Most of the visitors were within 21- 40 years (57.5%) old; males (61.2%), unmarried/singles (48.8%) while 89.7% had a tertiary education. Recreational visitors spend between N500:00 and N2000:00 averagely per visit and were acquainted with environmental amelioration benefits such as shade, air purification and watershed protection. Visitors identified poor awareness as a major hindrance towards proper management of the centres. Age, marital status and academic qualifications had significant influence on how respondents spend their leisure using chi-square test at *p* = 0.01. Age (21 – 40years) is positively associated with outdoor recreation activities.

26 Conclusion: Tourists in Ibadan are aware of multiple benefits associated with green space recreation.
27 Also visitors of all ages and marital status visit green spaces for recreational activities. It is recommended

that efforts should be made by owner agencies to improve recreational facilities in the existing urban green areas such as tree planting for improved landscape and engage trained professionals for improved

- 30 management.
- 31

32 Keywords: Appraisal, green areas, outdoor - recreational centres, awareness

#### 34 **1. INTRODUCTION**

35 Cities cover about 3% of the Earth's land surface with green spaces as a major environmental resource of 36 urban landscape [1]. The ambience of urban planning does not only cover matters of the built 37 environment such as housing and transportation network but also the integration of green spaces into the 38 physical urban landscape [2]. These urban green spaces literally covers all public and private open 39 spaces in urban areas mostly covered by vegetation which are directly (e.g. active or passive recreation) 40 or indirectly (e.g. positive influence on the urban environment) available for use [3]. Designated urban 41 green areas such as city recreational parks have common occurrence in Europe and America cities [4] 42 compared to the developing sub-Sahara West African cities. In Nigeria, urban planning integrates green 43 areas for recreation purposes only on paper; however, there is extremely poor execution of such plans in 44 most cases [5]. Scanty occurrence of urban green spaces for recreation in developing West Africa 45 countries may be linked to poor execution of urban plans.

46 Forests play many diverse and complicated roles in our lives. Besides the production of biological 47 resources and provision of societal benefits and service functions, forests are renewable natural assets. Thus, with good policies and protective planning, they can be increased and sustained. Psychologist, 48 49 sociologist and mass media agree on the view that the quality of urban life depends largely on the amount 50 and quality of green areas within [6, 7]. Trees and shrubs provide their own inherent beauty in all settings. 51 It's the aesthetic and recreational values of trees, forest, and parks that are directly identified by most 52 urban dwellers. Trees fulfill certain psychological, social and cultural needs of urban dwellers [8]. They 53 play a very important social role in easing tension and improving psychological health. People simply feel better living around the trees. The rustling of leaves and the whistle of the wind through a canopy produce 54 55 pleasant sounds. The development of whispering palms tourist resort at Iworo, Badagry in Nigeria has led 56 to the development and influx of people to the area [9]. Urban green areas do not only improve ecological 57 and psychological environment of urban population, but also uplift economic conditions of the community. 58 Green space/areas bring back certain harmony to the urban environment and therefore, play a vital social 59 role in ceasing urban tensions. Urban green areas/spaces are usually developed and managed 60 exclusively on the basis of their utilitarian benefits such as aesthetic, recreation/social, health and spiritual 61 values. Only recently has their full value to urban dwellers been considered and a closer look is given to 62 the environmental services and economic benefit they provide [10]. The primary functions of urban parks 63 and green areas are to ensure satisfactory surroundings for recreational and social activities [11]. 64 The green areas in urban communities provide a number of environmental benefits such as carbon fixing, temperature moderation, air quality improvement and noise abatement. These factors improve the lives of 65 66 people living in built-up areas. Such benefits are derived not just from public parks, but also private green 67 spaces/areas such as yards, campuses and green spaces around businesses [12]. However, explosion of 68 population growth with increased rate of urban development lead to drastic exploitation of nature resulting 69 to an unhealthy ecology, which is alarming to the urban dwellers. Cities in many developing countries are 70 faced with challenges of climate change resulting in problems like deterioration of air quality, higher air 71 temperature and increased noise levels. Also, there were greater psychological stress and deceased 72 sense of community participation in the rational use of earth resources to achieve the highest quality of 73 living at it simplest. This study therefore investigated the perception of urban dwellers on the value of 74 green areas, recreation and their impacts on socio, physical and psychological lives in Ibadan, one of the

75 largest cities in Nigeria

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# 78 2.0 METHODOLOGY

### 79 2.1 Study Area

80 The study was carried out in Ibadan, the largest city in West Africa [13]. It comprises of eleven (11) local

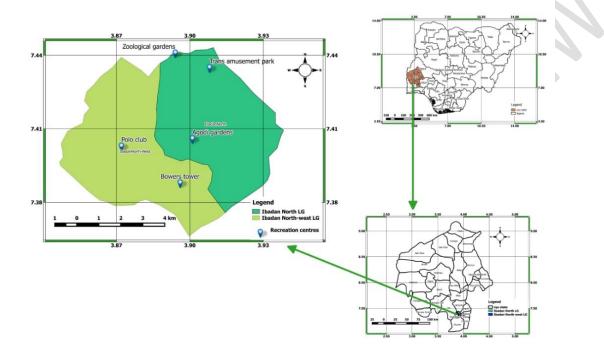
government areas, and has a substantial and self-sustaining economic base. It lies in the extreme South-West of Nigeria between latitude  $7^{0}25^{1}$  North and longitude  $3^{0}3^{1}$  East (Fig 1). The city and its

surroundings were naturally rich with green vegetation of panoramic beauty and elegance, but in recent

years deforestation associated with city expansion, firewood collection as well as hill cutting principally for

brick-making and housing development have stripped the hills bare. However, a limited number of green

86 areas/green spaces still exist in the urban area of metropolitan Ibadan which is our sampling area.



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# 88 Fig 1: Map of Ibadan Showing the Study Area

# 89 2.2 Sampling procedure

90 The survey was purposively conducted in five (5) locations based on recreational potentials associated 91 with forests and other green environments. Indoor recreation centres and sites without green vegetation 92 were not considered for questionnaire administration hence; all sites with green spaces in Ibadan 93 metropolis were selected for the study. Selected recreational centres were: Bower's Tower, Oke Aare; Zoological Gardens, University of Ibadan; Polo Club, Onireke GRA; Trans Amusement Park, Bodija and 94 95 Agodi Gardens, Parliament road Secretariat, Total enumeration of the people who patronized the 96 selected recreation sites during the course of the study was carried out. The study was conducted with 97 the administration of structured questionnaire consisting of two sections. These included demographic 98 and socio-economic section which provided answers to questions on personal data while th0e other 99 section sought information on perception of visitors on management techniques, benefits of green areas 100 and problems associated with the management of the green areas and recreational centres. In all, 178 101 visitors were encountered during the survey and structured questionnaires administered out of which 18 102 did not return the questionnaires for analysis, hence, 160 questionnaires were retrieved from the field 103 which represents 89.90% returns. The data collected were analyzed on the basis of socio-economic and 104 demographic factors of the respondents using descriptive statistics while chi-square was used to test for

association between the demographic factors of respondents and their perceptions towards the benefits

106 of green areas.

# 107 **3.0 RESULTS AND DISCUSSION**

108 Most visitors to the recreation centres were within 21- 40 years (87.5%) while 41-50 years and 50 years 109 above age ranges were just 8.80% and 3.80% respectively (Table 1). This shows that the people that visit 110 recreation centres were mainly youth, who are full of activities and would like to find ways of relaxing after 111 work. They are usually fascinated about recreation and found relaxation necessary as a way of catching 112 fun as well as renewing their strength after the daylong stress and in preparation for the next day. Similar 113 finding was reported by [14] who observed that recreational sites are more attractive to 21- 40 age class. 114 Moreover, [15] reported teenagers form more than 50% of visitors to recreational centres in Faisalabad, 115 Pakistan for exercises such as jogging and walking while [16] noted 45.5% of visitors to Makurdi zoo in 116 Nigeria consist 15 - 30 years in age. Influx of youth recorded in recreational centres is usually connected but not limited to refreshment and exercise; it also serves as education tour for the young people. 117 118 Patronage of more males (61.2%) and 38.8% females implies that males are less occupied after day's 119 work and so visit recreation centres frequently than females. Similar trend was also observed in Victoria 120 Falls Rainforest, Zimbabwe [17]. The reason for reduction in female patronage may be connected to 121 attending home duties after work especially in black African setting where most home chores are left to 122 the female folk. Outside black Africa, female frequents recreational centres than males as observed in 123 Barbados [18]. The percentages of singles, married, divorced and widowed respondents were 48.8%, 124 47.4% 2.5% and 1.3% respectively. Also, academic gualification had some influence on people's 125 perception of recreation centres, green areas and their consideration about leisure. Sum of 89.7% had 126 tertiary education experience while school certificate holders were just 5%. This showed that the learned 127 patronize, appreciate and have passion for green environment; meanwhile it has been observed by [19] 128 that higher educational attainment tends to increase the awareness and relevance of recreational park.

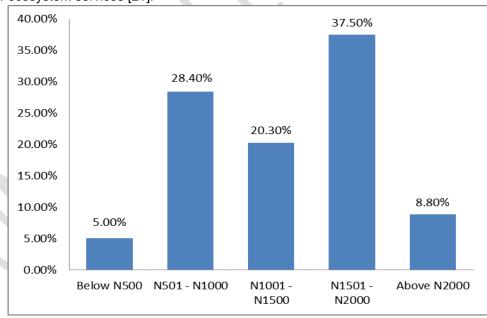
#### 129 Table 1: Demographic factors of visitors to selected recreation centres in Ibadan Age distribution Frequency Percentage (%)

	, igo diotribution	Troquonoy	roroontag
	21-30 years	92	57.5
(	30-40 years	54	30.0
	40-50 years	14	<mark>8.80</mark>
	50-60 years	6	<mark>3.80</mark>
	Total	160	100
	Gender		
	Male	98	61.2
	Female	62	38.8
	Total	160	100
	Marital Status		
	Single	78	48.8

76	47.4
4	2.5
2	1.3
160	100
ı	
144	89.7
8	5.0
8	5.3
160	100
	4 2 <b>160</b> 144 8 8

#### Source: Field Survey, 2019

131 Figure 2 shows that the amount spend per visit by majority of the respondents during the survey ranged 132 between N500.00 and N2,000.00 only. A higher number of the respondents spent between N1500.00 -133 N2,000.00 (37.50%), 8.8% spent above N2,000.00 while 5.0% spent below N500.00 per visit. Valuing 134 services such as Recreation Park can be quite difficult, because markets and prices for such ecosystem 135 services do not exist. Approaches such as stated preference approach and revealed preference approach 136 are often used to estimate public goods [20], while market and demand for ecosystem services is 137 simulated using willingness to Pay (WTP) or willingness to Accept (WTA) for hypothetical changes in the 138 provision of ecosystem services [21].



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Fig. 2: Amount spent on outdoor - recreation per visit by tourists in Ibadan

Figure 3 revealed that most respondents were very much aware of various environmental values of green areas and leisure centres. The major environmental benefits visitors acquainted with are shade effect (95.0%), recreation/aesthetic (93.8%), air purification (90.0%), environmental amelioration (92.5%) and watershed protection (82.00%). It also indicated that majority of the respondents are more conscious of their values on environmental development. [22] opined that adequate leisure for people can reduce various societal problems ranging from idleness, depression, violence, alcoholism, drug abuse and other related vices. These are golden roles played by recreational green spaces among others in the society both in developing and developed countries which cannot be overemphasized.

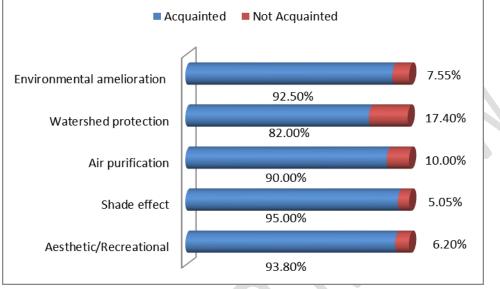




Fig. 3: Perceived environmental benefits enjoyed by visitors from green areas in Ibadan

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152 Respondents enjoyed different facilities in the centres which include tree shading (15.0%), games for 153 adult and young people (21.3%), nature viewing (26.3%), wildlife (22.5%), cool breeze (13.8%) and 154 bar/restaurant service for drinks (1.35%). The human love for green areas associated with natural 155 shading has sustained tourism and recreation around the world for decades. This unique natural scenery 156 is one of recreation's greatest assets and a fundamental cornerstone that provides opportunities for 157 relaxation as well as appreciating the wonders of nature. [23] listed basic facilities of publicpark to include; 158 grassed area for field sports, paved areas for court games (basketball, volleyball), swimming pool, 159 recreational building, picnic facilities, space for adult passive recreation, parking areas and rest rooms. 160 Outdoor recreation activities have the capacity to bring joy, pleasure and improved health provided the 161 necessary facilities are in place and functional [24].

162 Good management is a vital aspect in the realization of set goals and objectives of any organization, institution of government especially in the case of those in charge of open space development. It 163 demands the need, aspiration and interests of people taken into consideration. The perceived hindrances 164 towards proper management of recreational centres in Ibadan enumerated by the visitors consists poor 165 awareness (55.1%) to lack of fund (16.3%), resource mismanagement (16.3%), lack of maintenance 166 (8.8%) and lack of organization (3.8%) is shown in Figure 4. Lack of awareness of existence of green 167 space recreation centres constitute the major hindrance amongst others, however, the 2006 National 168 Population Census estimated Ibadan metropolis to be inhabited by 1.34 million people [25]. Operators of 169 outdoor recreation centres need to cash in on the advantage of the teeming population and launch proper 170 171 awareness campaign to unleash the huge potential for social and economic gains from green space 172 recreational centres in Ibadan.

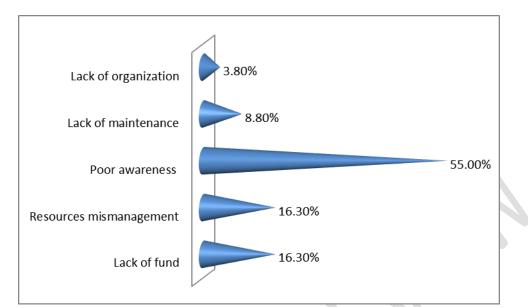


Fig. 4: Respondents' views on challenges of green space recreation centres in Ibadan

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Age, marital status and academic qualification had significant influence on how respondents spent their leisure in Ibadan. Youths and persons with at least secondary education were aware of the benefits of green spaces recreation hence; visit more than persons with less educational qualification. The inferential statistics showed no significant difference on visitors gender when subjected to chi-square (Pearson) at = 0.01 probability level.

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Table 2: Chi-square analysis on the visitors' socio economic status and knowledge of<br/>environmental benefits of green areas in Ibadan

Socio-Economic value	Value	Df	Significant
Gender	6.37	10	.27ns
Age	31.59	30	.01**
Marital status	49.63	30	.00**
Academic qualification	82.20	50	.00**

# 183 \*\*Significant at = 0.01

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# 185 4.0 CONCLUSION AND RECOMMENDATION

186 In the light of what seemed to be considerable ecological, social and psychological advantages of urban green areas, its systematic promotion could be one of the most direct means of promoting environmental 187 188 development and meaningful participation in outdoor recreational activities by the urban dwellers. Green 189 areas in urbanized areas are usually located on left-over or challenging building sites. However, for 190 maximum benefits in terms of active use, green areas need to be established near the people. Green 191 areas that can only be viewed, where the public cannot enter, are only valuable as habitat for animal and 192 also for improvement of air and water quality. In designing more sustainable and diverse landscape in 193 highly visible areas, care must be taken to see that they are cared for. Based on findings from this work, it 194 recommended that the green areas with potential recreational sites of tourist attractions should be

- 195 stocked with varied suitable indigenous and exotic tree species to provide aesthetics, ecological, 196 economic benefits and other recreational values to urban dwellers of Ibadan metropolis.
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#### 199 **COMPETING INTERESTS**

- 200 There is no competing interest of any form in this work
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#### **5.0 REFERENCES** 203

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- 1. Mensah, CA. Urban green spaces in Africa: Nature and Challenges, International Journal of Ecosystem 2014, 4(1): 1-11 DOI: 10.5923/j.ije.20140401.01
- 2. Baycan-Levent, T, Vreeker, R, and Nijkamp, P. A multi-criteria evaluation of green spaces in European cities. European Urban and Regional Studies, 2009, 16(2), 193-213.
- 3. URGE Team. Making greener cities A practical guide, No. 8/2004. 2004, Leipzig-Halle: UFZ Centre for Environmental Research
- 4. Clark P, Niemi, M and Niemelä. J. Sport, Recreation and Green Space in the European City, 211 212 Studia Fennica Historica 16: 9-24, DOI: http://dx.doi.org/10.21435/sfh.16
  - 5. Oladele AT and Udo NE. Ecosystem services and mapping of amenity trees in Port Harcourt Zoo, Nigeria. African Journal of Agriculture Technology and Environment 2017, 6(1): 106-117
- Mensah, CA, Andres, L, Perera, U and Roji, A. Enhancing quality of life through the lens of green 215 6. spaces: A systematic review approach. International Journal of Wellbeing, 2016, 6(1):142-163. 216 217 doi:10.5502/ijw.v6i1.445
- 218 7. Braubach M, Egorov A, Mudu P, Wolf T., Ward TC, Martuzzi M. Effects of Urban Green Space on Environmental Health, Equity and Resilience. In: Kabisch N., Korn H., Stadler J., Bonn A. (eds) 219 220 Nature-Based Solutions to Climate Change Adaptation in Urban Areas. Theory and Practice of Urban Sustainability Transitions. 2017:187-205, Springer, Cham, https://doi.org/10.1007/978-3-221 222 319-56091-5 11
- 223 8. Dwyer, JF, Nowak, DJ and Watson, GW. Future Directions for Urban Forestry Research in the 224 United States. 2002, J. Arboric. 28: 231-236.
- 9. Ajani, F and Olaoluwa, DO. Ecotourism at Whispering Palms, Lagos State; Profiling Tourists to 225 its Ecotourism Operations. Mangroves and Wetlands of Sub-saharan Africa: Potential for 226 Sustainable Livelihoods and Development. Ed. O.Y Ogunsanwo and A.O. Akinwole. Proceedings 227 of the 38<sup>th</sup> Annual Conference of the Forestry Association of Nigeria held on 7<sup>th</sup> -11<sup>th</sup> March. 228 2016: 426-435 in Port Harcourt, Rivers State. 229
- 10. Gascon M, Triguero-Mas M, Martínez D, Dadvand P, Rojas-Rueda D, Plasència A and 230 Nieuwenhuijsen MJ. Residential Green Spaces and Mortality: A Systematic Review. Environ. Int. 231 232 2016; 86:60-67. doi: 10.1016/j.envint.2015.10.013.
- 233 11. Nilsson, K and Randrup, TB. Urban and peri-urban forestry. In Proceedings of the Xi World 234 Forestry Congress, 1997, 1: 970-110
- 235 12. Bonsignore, RE. Urban green space: effects on water and climate Design Centre for American Urban Landscape, Design Brief, 3 (2003), pp. 1-10 236
- 237 13. Azeez, T, Adeleye, O and Olayiwola L. Spatial variation in residents' accessibility to land for 238 housing development in Ibadan metropolis, Oyo state, Nigeria. Ethiopian Journal of 239 Environmental Studies & Management, 2016, 9(Suppl. 2): 1047 - 1058. doi: 240 http://dx.doi.org/10.4314/ejesm.v9i2.10S

- Limaei, SM, Ghesmati, H, Rashidi, R and Yamini, N. Economic Evaluation of Natural Forest Park
  Using the Travel Cost Method (Case study; Masouleh Forest Park, North of Iran). *Journal of Development and Agricultural Economics*, 2014, 3(6): 230-235.
- 15. Saleem, A and Kamboh, K. Why people visit parks? the role of gender, age and education among
  urban park visitors in Faisalabad. *International Journal of Asian Social Science*, 2013, 3(10):
  2196-2203
- Alarape, AA, Yager, GO and Salman, KK. Assessment of Tourists Satisfaction and Perception in Makurdi Zoological Garden, Benue State, Nigeria. *Journal of Research in Forestry, Wildlife and Environmental*, 2015, 7(1): 1-12
  T. Zhou, Z. A survey of visitor satisfaction at Victoria Falls Rainforest. *African Journal of Hospitality*,
  - 17. Zhou, Z. A survey of visitor satisfaction at Victoria Falls Rainforest. *African Journal of Hospitality, Tourism and Leisure*, 2018, 7(1):1-21
- 18. Jonsson, C and Devonish, D. Does Nationality, Gender, and Age Affect Travel Motivation? a
   Case of Visitors to The Caribbean Island of Barbados. *Journal of Travel & Tourism Marketing*,
   2008, 25:3-4, 398-408, DOI: 10.1080/10548400802508499

261

262

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264 265

266

267

- Luke, OO and Amujo, BT. Socio-Economic Determinants of On-day Site demand for Recreation
   in Old Oyo National Park, *Nigeria Journal of Development and Agricultural Economics*, 2011.3(6):
   230-235.
- 258 20. Popoola, L and Ajewole, OI. Willingness to Pay for Ibadan Urban Environment Rehabilitation
   259 through Reforestation Projects. *The International Journal of Sustainable Development and World* 260 *Ecology*, 2002, 9:256-268. (U.K).
  - Nielsen-Pincus, M, Sussman, P, Bennet, DE, Gosnell, H and Parker R. The Influence of Place on the Willingness to Pay for Ecosystem Services. *Society & Natural Resources*, 2017, 30:12, 1423-1441, DOI: <u>10.1080/08941920.2017.1347976</u>
  - 22. Oladeji, SO and Adedapo, OO. Performance and Visitor's Satisfaction of Recreation Facilities in Akure Metropolis: A Veritable Tool for Impacts Studies in Undp Mdg's Cities in Nigeria. *British Journal of Economics, Management & Trade 2014, 4(8): 1230-1250*
  - 23. Runte, A., 1997. National Parks: The American Experience. U of Nebraska Press. P27.
  - 24. Cooper C, Fletcher J, Gilbert D, Wanhill S. Tourism Principles and Practice (4th ed.).FT Prentice Hall, UK; 2008
- 270 25. Adelekan, IO. Ibadan City Diagnostic Report, 2016, Working Paper #4. Urban Africa Risk
   271 Knowledge Pg 21. Retrieved July 2019 from https://www.urbanark.org/Ibadan-city-diagnostic 272 report