

Website and Television Broadcasting Of National Parks: A Perceived Possibility of Providing Attitude Change Towards Forest And Wildlife Conservation And Protection In Nigeria

Olusegun J. ADIGUN^{1*}, Eric A. IRUNOKHAI¹, E. K. ONI², Yetunde M. AREO³ and Oluwafemi A. ADENIJI⁴

¹ Department of Computer Science, Federal College of Wildlife Management, New Bussa, Niger State, Nigeria

² Federal Polytechnic Ede, Ede, Osun State, Nigeria

³ Department of Vocational Studies, Federal College Forestry, Ibadan, Nigeria

⁴ Department of Forestry Technology, Federal College of Wildlife Management, New Bussa, Niger State, Nigeria

Abstract

During the recent coronavirus outbreak, organizations such as churches, schools and business organizations has adopted website and television broadcast to reach their congregations, students and business associates and consumers. Several organizations that did not see need for website and television broadcast (WTB) have also been made to see the need and everyday more organizations are adopting these technologies for information dissemination. The need for national parks to consistently use these technologies to educate the populace on the need for forest and wildlife conservation and protection is not far-fetched as several attempts to ensure forest and wildlife conservation and protection has proved abortive especially in developing countries. It is the contention of the study that WTB of nature parks provide opportunity to adequately educate the populace and provide the needed attitude to conserve and protect forest and wildlife resources. The study utilized online survey through self-constructed questionnaire administered to respondents online to gather data to test the validity of the claim. The responses obtained were statistically evaluated to determine the suitability of WTB of nature parks to providing adequate education to the populace on the need for forest conservation and protection and consequently provide the needed attitude. The results shows that WTB intervention is not efficient enough ($\mu=4.87$ on a rating scale of 1 to 10). It also shows that a significant opportunity exist to educate resident through WTB intervention ($\mu=7.87$, $\Delta\mu > 0$, $p<0.05$ on a rating scale of 1 to 10) and a significant positive attitude of the populace to residents' forest and wildlife conservation and protection in Nigeria when adequate education to conserve and protect forest and wildlife is received through WTB of nature parks ($\mu=16.45$, $\Delta\mu > 0$, $p<0.05$ on a rating scale of 1 to 20). It is therefore recommended that national parks in Nigeria adopt adequate WTB of nature parks.

Keywords: National Park, Website, Television, Broadcasting, Forest, Wildlife, Conservation, Protection

Date of Submission: 26-10-2020

Date of Acceptance: 05-11-2020

I. Introduction

There is virtually nothing that information technology does not found applicability nowadays. For the purpose of this study information technology can be adopted to provide visualization of National parks flora and fauna to educate the populace about the need for forest conservation and protection. Forests have always been at the forefront of nature conservation. Forest and wildlife conservation is required in any society as forests are one of the most conspicuous ecosystems on the planet and have immense economic, cultural, and conservation importance [1]. Forests are required for many functions and services to maintain balancing of the ecosystem: they provide support for biodiversity, provide opportunity for hunting, various recreation services, and protection of water, soil, and air quality, and sequestration of carbon [2].

In Nigeria, growing rate of urbanization and inappropriate deforestation without commensurate replacement of the felled trees has put a lot of stress on forest conservation and protection. The need therefore arises for adequate forest conservation education which is believed is capable of providing right attitude to forest conservation and protection. Several attempts have been made at conserving and protecting forests in Nigeria from going to extinction without uniform replicable success. Some of these efforts are what brought about the establishment of Federal Ministry of Environment with her associated parastatals and departments including the Forestry Research Institute of Nigeria, Federal Department of Forestry and Nigerian National

parks among others. However, with establishments of all these departments, agencies and parastatals, forest lands in Nigeria are daily becoming reduced in an alarming rate [3].

National/Nature Parks and game reserves are unique public lands or bodies of water within a country, set aside by the government to protect ecosystems, plant and animal species, scenic landscapes, geologic formations, or historical or archaeological sites[4].The increasing extinction rates of the majority of forest animals are the rationale for the establishment of National parks in Nigeria[5]. They are saddled with the responsibility of conservation of selective and representative samples of wildlife communities as well as the conservation of biological diversity in Nigeria[6]. However, even in these forest reserved areas, there are still reports of trespasses to forest and forest products. Thus, [7] reported that Nigeria could face the possibility of timber and fuel wood scarcity towards the end of the 21st century. Thus, it has been predicted that within the next fifty years, unless adequate measures are taken, most humid tropical forestland area in Africa could be transformed into unproductive land and the deterioration of the savannah into desert will be accelerated[8] [9][10][11].

It is however the contention of this study that Website and Television Broadcasting of flora and fauna in Nigerian national parks present the possibility of providing appropriate forest conservation and protection education with the consequent result of affecting attitude of the residents to adopting lifestyle that conserves and protects forest,wildlife and their products.

Purpose of the study

The aim of the study is to establish whether or not Website and Television Broadcasting (WTB) of national parks in Nigeria can adequately educate the populace on the need for nature conservation and protection in Nigeria to provide the desired attitude change to conserve and protect our forest and wildlife. The specific objectives include:

- i) To investigate the extent to which WTB intervention has currently been adopted to educate residents about need for forest conservation and protection in Nigeria.
- ii) To evaluate the effectiveness of forest conservation and protection education provided through WTB intervention currently in Nigeria.
- iii) To evaluate the rate at which WTB adoption would positively stimulate forest conservation and protection in Nigeria.
- iv) To make recommendations based on the findings.

Research Hypothesis

The study was guided by the following hypotheses:

- H₀1: The current WTB of nature parks puts in place by the management of National parks in Nigeria is not effective enough to educate populace about forest conservation and protection.
- H₀2: The perceived opportunity to educate residents of need for forest conservation and protection through adequate WTB intervention is not significant.
- H₀3: Provision of adequate (suitable and effective) forest and conservation and protection education will not affects residents' attitude to forest conservation and protection in Nigeria.

II. Methodology

The study adopted the survey design. There was no special treatment given to the subjects and there is no control group. The study was commenced by making a checklist of awareness mechanisms of Nigerians about the existence of national parks in Nigeria was obtained and the survey was conducted based on the checklist obtained. Afterwards a self-constructed questionnaire was developed and transformed into a Google form and the link to the Google form was sent to WhatsApp and Facebook contacts of researchers included in the study. The contacts were followed up to respond to the questionnaire for a period of two (2) weeks between 18th of May and the 4th of June 2020. On the 4th of June further responses were declined, the responses supplied on or before that day were retrieved from the internet and the supplied responses were downloaded together with charts generated by Google form. One hundred and fifty nine (159) responses were retrieved at the end of the study and the retrieved responses were transcribed into Statistical Package for Social Sciences (SPSS) for statistical analysis.

III. Results And Discussions

3.1 Personal Data of respondents

The personal characteristics of the respondents that are of importance to this study are described in figures 1 – 3. Based on age, the respondents are distributed across various age brackets even though population between 31 – 45 (46.5%) and 16 – 30 (44.0%) years of age have fairly higher representation than other age brackets. Figure 3 shows that a higher percentage (92.5%) of the respondents have access to satellite television

similarly, figure 3 shows that a higher percentage (94.3%) of the respondents also have access to mobile internet. Figure 2 and 3 already shows that there is higher likelihood that broadcasting of national parks through website and television will get to majority of the respondents as the respondents possess adequate tools that give them access to these resources.

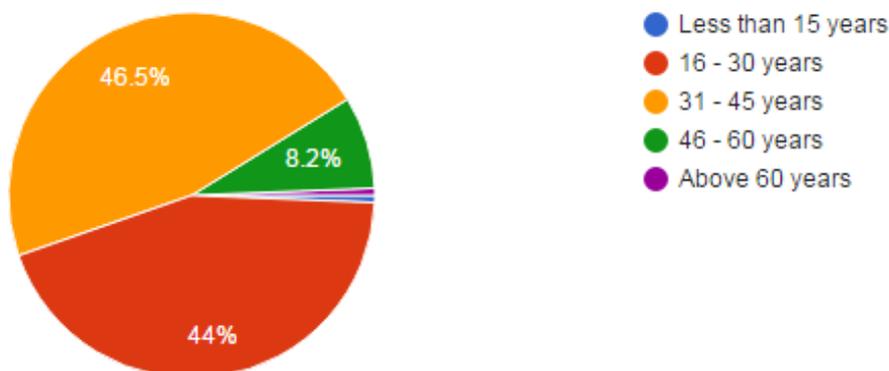


Figure 1: Distribution of the respondents by age

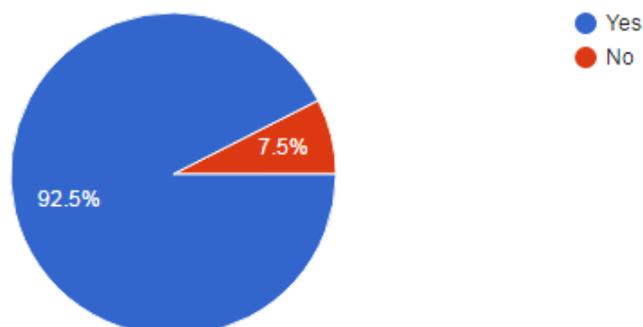


Figure 2: Distribution of the respondents' access to satellite television

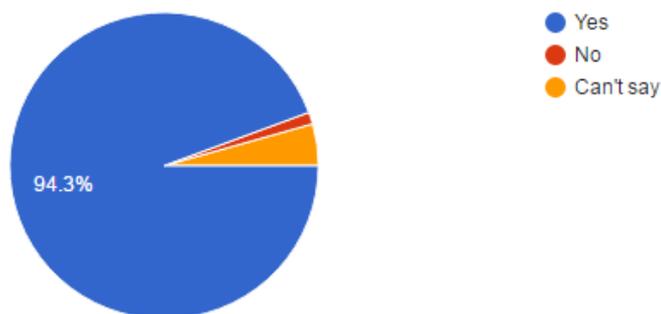


Figure 3: Distribution of the respondents' access to internet service

3.2 Data Analysis

Figures 4(i) and 4(ii) shows the extent to which WTB intervention has currently been adopted to educate residents about need for forest conservation and protection in Nigeria through various methods of education media. Figure 5 shows the consequent appreciation for forest and wildlife conservation and protection based on nature program seen on website and television programs.

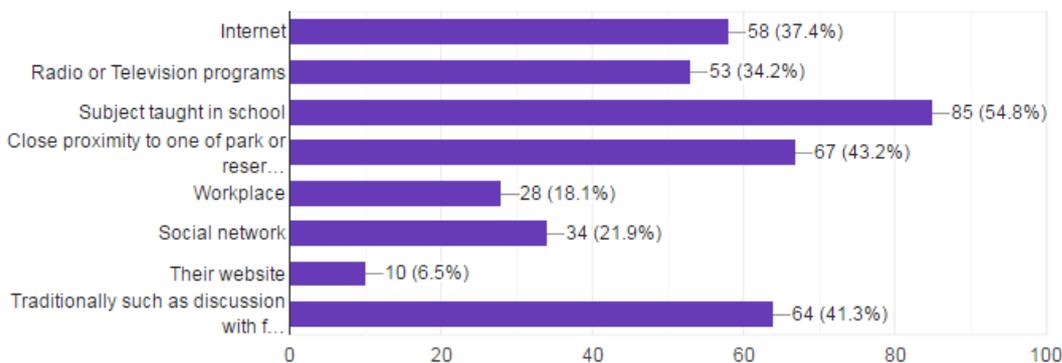


Figure 4(i): Channels of awareness about the existence of national parks in Nigeria

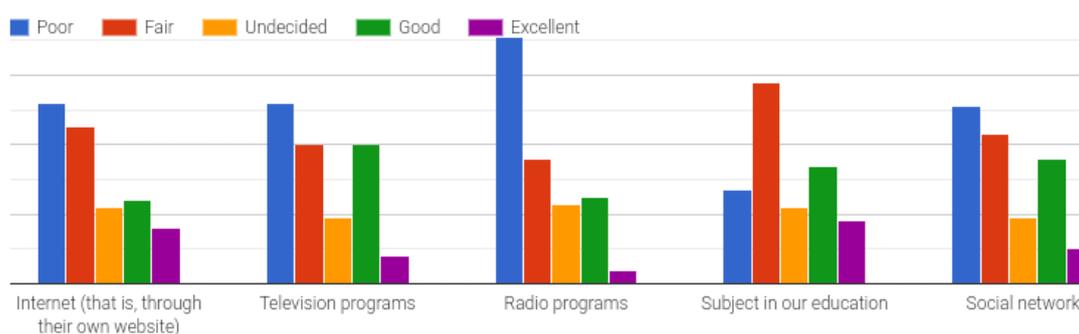


Figure 4(ii): Level of adoption of various mediato educate residents about need for forest and nature parks conservation and protection in Nigeria

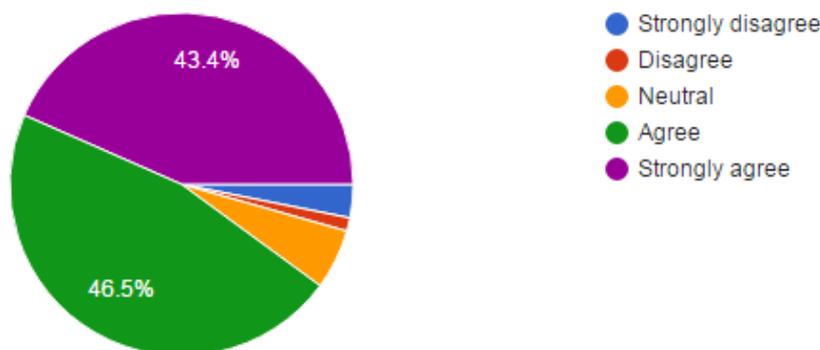


Figure 5: Appreciation for forest and wildlife conservation based on nature programs seen on website and television channels

To test the hypotheses stated, table 1 show the effectiveness of current WTB of nature parks puts in place by the management of National parks in Nigeria. Table 2 show the perceived opportunity to educateresidents of need for forest conservation and protection through WTB of nature parks while table 3 shows the effects of forest and conservation and protection education on attitude to forest and conservation and protection.

Table 1: Effectiveness of the current WTB intervention on forest conservation and protection education of the populace

Awareness rating	Mean	Mean difference	Rating scale	p-value
	4.87	(0.133)	1 – 10	0.51

Table 2: Perceived opportunity to educate residents on need for forest conservation and protection through WTB intervention

Opportunity rating	Mean	Mean difference	Rating Scale	p-value
	7.87	2.87	1 – 10	0.00

Table 3: Perceived effects of forest and conservation and protection education on attitude to forest and conservation and protection

Attitude rating	Mean	Mean difference	Rating Scale	p-value
	16.45	6.45	1 – 20	0.00

IV. Discussion of Findings

The result of the analysis presented in table 1 shows an ineffective education of the populace on the need for forest conservation and protection in Nigeria through current WTB intervention adopted by management of national parks ($\mu=4.87, \Delta\mu <0$ on a rating scale of 1 to 10). This result was further substantiated by figures 4 (i) and (ii). Figure 4 (i) shows those that were educated about existence of national park through the internet (37.4%), through radio and television broadcast (34.2%) and social network (21.9%) were less when compared with those that were educated through traditional means including subject taught in school (54.8%), living close to a national park (43.2%) and discussion with friends (41.3%). Furthermore, figure 4 (ii) showed that the level of adoption of WTB to educate the populace about need for forest and nature parks conservation and protection in Nigeria tends to be poor. Thus the findings established that the current education of the populace on the need for forest conservation and protection through the currently adopted WTB intervention is ineffective. It is most likely that the reason why [12] still found that protected areas continue to face threats from human pressures and legal designation was because WTB of nature parks is not adequately adopted in educating the populace about need for forest and wildlife conservation and protection especially in developing countries.

Table 2 depicts the perceived opportunity to educate residents on need for forest conservation and protection through WTB intervention and it shows that a significant opportunity exist to educate resident through WTB intervention ($\mu=7.87, \Delta\mu >0, p < 0.05$ on a rating scale of 1 to 10). This is corroborated by figures 2 and 3 that shows that the respondents possess the necessary technology (satellite television – 92.5% and internet – 94.3%) required to have access to WTB education media on need for forest and wildlife conservation and protection.

Table 3 shows a significant positive attitude of the populace to residents' forest and wildlife conservation and protection in Nigeria when adequate education to conserve and protect forest and wildlife is received through WTB of nature parks ($\mu=16.45, \Delta\mu >0, p < 0.05$ on a rating scale of 1 to 20). This is corroborated by figure 5 that shows that majority of the respondents agreed (43.4% strongly agreed and 46.5% agreed) that they possess appreciation for forest and wildlife conservation and protection based on nature visualization programs they see on website and television channels. As such the national parks are at advantage of educating the populace adequately on need to adopt positive attitude to forest and wildlife conservation and protection if they adopt effective WTB intervention.

V. Conclusion And Recommendation

The study evaluates the possibility of providing attitude change by forest and wildlife exploiters towards forest conservation and protection in Nigeria through the implementation of adequate website and television broadcasting (WTB) of national parks flora and fauna. It is believed that website and television broadcast of national parks provide adequate education to the populace on the need not to be trespassing nor serving as threats to forest and wildlife resources especially in reserved nature parks. Data were collected to test the reliability or fallibility of this claim and the data collected were analysed to test the hypotheses stated. The result showed that WTB of national parks is not currently annexed efficiently enough to educate the populace on the need for forest and wildlife conservation and protection. Opportunity was found to exist for adequate education of the populace on the need for conserving our forest and wildlife through WTB of nature parks. Furthermore, it was found that education received through WTB has the capacity to bring about the desired change of attitude towards forest and wildlife conservation and protection.

The result of the study is limited to forest and wildlife in nature parks within Nigeria thus the result may be different from similar study. As such, future studies can be extended to include respondents from other parts of the world.

References

- [1]. Arevalo J. Edgardo and Ladle James Richard (2018). Challenges of Forest Conservation. Chapter in: *The Paradigm of Forests and the Survival of the Fittest*. DOI: 10.1201/9781315367170-7 Available at: <https://www.researchgate.net/publication/332417471>
- [2]. Loehle Craig, Schilling E. B., Wigley Thomas Bentley and Tatum Vickie L. (2009). Achieving Conservation Goals in Managed Forests of the Southeastern Coastal Plain. Article in *Environmental Management* (2009) 44:1136–1148. DOI 10.1007/s00267-009-9389-2
- [3]. Owolabi Saka-rasaq (2019). Forest Loss in Nigeria, the Impact on Climate and People from the perspectives of illegal Forest activities and Government Negligence. Unpublished BSc. Thesis: Raseborg. Retrieved October 9, 2020, from http://theses.fi/bitstream/handle/10024/170981/Forest_Loss_Nigeria_Owolabi_2019_DSCM_Thesis.pdf%3Fsequence
- [4]. Repanshek, Kurt. "National Parks and Preserves." Microsoft® Student 2008 [DVD]. Redmond, WA: Microsoft Corporation, 2007.
- [5]. Onihunwa, J. O. (2019). Development of National Park Web Information System: A Case Study of Kainji Lake National Park, New Bussa, Niger State, Nigeria. *International Journal of Applied Research and Technology*. 8(2): 121 – 129.
- [6]. Nigeria National Park (2020). retrieved from: <http://www.nigeriaparkservice.org>. Accessed on: July, 2020
- [7]. Areola, O. (1997). The Political Reality of Conservation in Nigeria. In: *Conservation in Africa People Policies and Practice*. J. Multidisciplinary, 3(2): 33-48.
- [8]. Kio, P.R.O. (1990). Wildlife Inventory by remote Sensing Techniques. Pp 1-7. *Wildlife management In Savanna Woodland* Edited by Ajayi, S. S. and Co. 273p.
- [9]. Hunter, N.M., Horritt, M.S., Bates, P.D., Wilson, M.D. and Werner, M.G.F. (2005). An adaptive time step solution for raster-based storage of cell modelling of floodplain inundation. *Advance Water Resource*, 28: 975-991.
- [10]. Medugu, N. (2010). *The Primary Source: Tropical Forests and Our Future*. Norton, New York.
- [11]. Halidu, S. K., Akande, O. A., Wahab, M.K.A., Omole, E. B., Alaye, S.A. and Osaguona, P.O. (2020). Rate, causes and impact of deforestation in Borgu Local Government Area of Niger State, Nigeria. *Ethiopian Journal of Environmental Studies & Management* 13(5): 633 – 642, 2020. ISSN:1998-0507 doi: <https://ejesm.org/doi/v13i5.11>
- [12]. Int'l Union for Conservation of Nature and Natural resources (IUCN, 1999). *Threats to forest protected areas: Summary of a survey of 10 countries carried out in association with the world commission on protected areas 2*

Olusegun J. ADIGUN, et. al. "Website and Television Broadcasting Of National Parks: A Perceived Possibility of Providing Attitude Change Towards Forest And Wildlife Conservation And Protection In Nigeria." *IOSR Journal of Electronics and Communication Engineering (IOSR-JECE)* 15(5), (2020): 17-22.