



**SCHOOL OF ENVIRONMENTAL TECHNOLOGY,
FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA, NIGER STATE, NIGERIA**

EDITORS IN CHIEF

R. E. Olagunju

B. J. Olawuyi

E. B. Ogunbode

**SETIC
2020
INTERNATIONAL
CONFERENCE**

BOOK OF PROCEEDINGS

MAIN THEME:

Sustainable Housing And Land Management



3RD -5TH MAY, 2021



**SCHOOL OF ENVIRONMENTAL TECHNOLOGY COMPLEX,
FUT, MINNA, NIGER STATE, NIGERIA**

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Federal University of Technology Minna, Nigeria

Host:

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Dean, School of Environmental Technology
Federal University of Technology Minna, Nigeria

**School of Environmental
Technology International
Conference
(SETIC 2020)**

3RD - 5TH MAY, 2021

**Federal University of Technology Minna, Niger
State, Nigeria**

CONFERENCE PROCEEDINGS

EDITORS IN CHIEF

R. E. Olagunju

B. J. Olawuyi

E. B. Ogunbode

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PREFACE

The School of Environmental Technology International Conference (SETIC 2020) is organised by School of Environmental Technology, Federal University of Technology Minna, Nigeria. In collaboration with Massey University New Zealand, Department of Civil Engineering Faculty of Civil Engineering and Built Environment Universiti Tun Hussein Onn Malaysia, Malaysia Centre For Professional Development and Industrial Project Development School of Professional and Continuing Education (SPACE) UTM-KL Malaysia, Global Academia, Department of Architecture, Faculty of Engineering and Architecture, Istanbul Gelisim University Istanbul Turkey, Sustainable Environmental and Technology (SET) Research Group, Department of Architecture, Universiti Sains Islam. The main theme for this year conference is “SUSTAINABLE HOUSING AND LAND MANAGEMENT”. This promotes and encourage innovative and novelty for policy issues for inclusive and sustainable housing, access to finance for housing and land development, sustainable building materials, building cost management, sustainable and resilient cities, geoinformatics for land management, rapid urbanization, sustainable land use and spatial planning, gender issues in access to land.

The responses from participants for this conference are overwhelming, well attended, and successful. The operation mode was Virtual for all participants who choose the oral presentation mode. While, Physical for all poster medium presenters. Our participants are from various Universities and other sector across the globe, from countries like United State for America (USA), Turkey, Malaysia, China, Saudi Arabia, Kenya, New Zealand just to mention a few. Hence, this conference provides a good platform for professionals, academicians and researchers to widen their knowledge and approach on latest advances in research and innovation. Papers presented in this conference cover a wide spectrum of science, engineering and social sciences.

Finally, a note of thanks must go to SETIC 2020 Local Organizing Committee (LOC) for their remarkable dedication in making this conference a success. We hope the event will prove to be an inspiring experience to all committee members and participants.

ACKNOWLEDGEMENTS

The effort put together in achieving the success of SETIC 2020 is predicated on the feat of the first and second edition of School of Environmental Technology International Conference held in 2016 and 2018, respectively. The support and goodwill from Vice-Chancellor of Federal University of Technology, Dean School of Environmental Technology, Dr Dodo Y. A., Dr Moveh S. and many other highly motivated people are highly appreciated.

It is also my privilege and honour to welcome you all, on behalf of the Local Organizing Committee (LOC) to the 3rd edition of the Biennial School of Environmental International Conference (SETIC 2020). This Conference which was earlier schedule for 7th to 11 April, 2020 is holding now (3rd to 5th May, 2021) due to the challenges of COVID-19 Pandemic and the ASUU-FGN crisis which made our public Universities in Nigeria to be closed for about one year. We thank God for keeping us alive to witness the great SETIC2020 event, in an improved form exploiting the new-normal situation posed by the Pandemic for a hybrid (i.e. both physical and virtual) form of Conference participation.

The conference provides an international forum for researchers and professionals in the built environment and allied professions to address fundamental problems, challenges and prospects Sustainable Housing and Land Management. The conference is a platform where recognized best practices, theories and concepts are shared and discussed amongst academics, practitioners and researchers. This 2020 edition of SETIC has listed in the program a Round Table Talk on Housing Affordability beyond COVID-19 with selected Speakers from across the globe available to do justice on the topic of discussion.

Distinguished Conference participants, permit me to warmly welcome our Keynote and Guest Speakers:

- Prof. Ts. Dr. Mohd Hamdan Bin Ahmad, *Deputy Vice Chancellor (Development) Universiti Technology Malaysia (UTM)*;
- Assoc. Prof. Dr. James O.B. Rotimi, *Academic Dean Construction, School of Built Environment, College of Sciences, Massey University of New Zealand*;
- Assoc. Prof. Sr. Dr. Sarajul Fikri Mohammed, *General Manager, Centre for Professional Development and Industrial Project Development School of Professional and Continuing Education (SPACE), UTM-KL*.
- Prof. Ts. Dr. Zanaail Abidin Akasah, *Visiting Professor on Sustainable Solar Integrated Design Building Design, International Micro Emission University (IMEU)/HIMIN Ltd. China & Senior Research Fellow, The Architects Resourcery, Jos, Nigeria*;
- Ar. Dr. Elina Mohd Husini, *Department of Architecture, Faculty of Engineering & Built Environment, Universiti Sains Islam*;
- Asst. Prof. Dr. Yakubu Aminu Dodo, *Department of Architecture, Faculty of Engineering and Architecture Istanbul Gelisim University, Istanbul Turkey*

and the five Speakers for our Round Table Talk on Housing Affordability Beyond COVID-19

- Dr. Muhammad Mustapha Gambo, *Manager, Policy, Research and Partnerships, Shelter Afrique, Nairobi, Kenya*;
- Prof. Dr. Soumia Mounir, *Department of Architecture Ecole Nationale d'Architecture d'Agadir [The National School of Architecture of Agadir], Morocco*

- Dr. Said Alkali Kori, *General Manager, Projects and Portfolio management, Family Homes Fund, Federal Ministry of Finance, Abuja;*
- Ts. Dr. Sasitharan Nagapan, *Department of Civil Engineering, Faculty of Engineering and Built Environment, Universiti Tun Hussein Onn Malaysia, Malaysia;*
- Dr. Mercy Nguavese Shenge, *AIA Assoc. Historic District Commissioner, City of Rockville, MD, USA.*

for accepting to share from their knowledge, wealth of experience and be available to interact with participants on varied issues on “**Sustaining Housing and Land Management**”.

As reflected on the Conference program, the Conference activities will be Virtual for power point presenters to run in four parallel sessions on the Zoon platform while the participants for Poster presentations (mostly Postgraduate students) are expected to have their Posters displayed in the Environmental Complex Building of the Federal University of Technology, Minna. With a total of One Hundred and One (101) articles captured in the Conference Proceedings covering the seven subthemes of the Conference, I have no doubt that we are all in for an impactful experience at SETIC2020 as we brainstorm, exchange ideas, share knowledge and participate in evolving more approach to sustainable housing and land management drives.

I implore us all to enjoy every moment of the deliberations and ensure we maximize the great opportunity offered by the Conference to network for better research and career development as we also make new friends.

I also on behalf of myself and the LOC express our appreciation to the Dean, School of Environmental Technology and the entire Staff of the School for giving us the opportunity to steer the ship for SETIC2020. To the Reviewers and various Committees that served with us, I say thank you for helping us through despite the pressure of work.

Thanks, and God bless you all.

Olawuyi, B.J. (PhD)
Chairman, LOC
SETIC2020

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DECLARATION

PEER REVIEW AND SCIENTIFIC PUBLISHING POLICY STATEMENT

3rd MAY 2021

TO WHOM IT APRIL CONCERN

I wish to state that all the papers published in SETIC 2018 Conference Proceedings have passed through the peer review process which involved an initial review of abstracts, blind review of full papers by minimum of two referees, forwarding of reviewers' comments to authors, submission of revised papers by authors and subsequent evaluation of submitted papers by the Scientific Committee to determine content quality.

It is the policy of the School of Environmental Technology International Conference (SETIC) that for papers to be accepted for inclusion in the conference proceedings it must have undergone the blind review process and passed the academic integrity test. All papers are only published based on the recommendation of the reviewers and the Scientific Committee of SETIC

Babatunde James OLAWUYI
Chairman SETIC 2020
Federal University of Technology, Minna, Nigeria

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Prof. Nuhu M. B.	Access to Finance for Housing and Land Development
Prof. Ajayi M.T.A	Policy Issues for Inclusive and Sustainable Housing
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Prof. Jimoh R.A.	Sustainable Building Material

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Dr. Isah A. D.	Member	Department of Architecture, Federal University of Technology Minna, Nigeria

PROFILE OF KEYNOTE SPEAKERS AND GUEST SPEAKERS

SETIC 2020 organisers wishes to thank our keynote speakers, and Guest speakers for accepting to create time to share from their rich wealth of knowledge and interact with delegates and participants on varied issues being examined at this year's conference. A brief profile of each keynote speaker is provided here, this would allow for future interaction and networking with them.

 <p>Key-Note Speaker I</p>	 <p>KEY NOTE SPEAKER II</p>	 <p>Key-Note Speaker III</p>
<p>Prof. Ts. Dr. Mohd Hamdan Bin Ahmad Deputy Vice Chancellor (Development) University Teknologi Malaysia</p>	<p>Prof. Ts. Dr. Zainal Abidin Akasah (Visiting Professor) Sustainable Solar Integrated Building Design International Micro-Emission University (IMEU)/NIMW Ltd China & Senior Research Fellow The Architects Renouancy, Jos Nigeria</p>	<p>Associate Prof. Dr. James O.B. Rotimi, Academic Dean Construction, School of Built Environment, College of Sciences, Massey University of New Zealand.</p>
 <p>Key-Note Speaker IV</p>	 <p>Guest Speaker I</p>	 <p>Guest Speaker II</p>
<p>Assoc. Prof. Sr. Dr. Sarajul Fikri Mohamed General Manager, Centre for Professional Development and Industrial Project Development School of Professional and Continuing Education (SPACE) UTM-RL Malaysia</p>	<p>Asst. Prof. Dr. Yakubu Aminu Dodo GREM, MyCREST MAARCHES Istanbul Gelism University, Istanbul Turkey</p>	<p>Ar. Dr. Elina Mohd Husini Department of Architecture Faculty of Engineering & Built Environment, Universiti Sains Islam Malaysia</p>

ROUND TABLE PANEL SPEAKERS

Round Table Talk
On Housing Affordability Beyond Covid-19

Main Theme

**SUSTAINABLE HOUSING
AND LAND MANAGEMENT**



Dr. Muhammad Mustapha Gambo
*Manager: Policy, Research and Partnerships,
Shelter Afrique, Nairobi, Kenya.*



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*Department of Architecture Ecole Nationale
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City of Rockville, MD. USA.*



Asst. Prof. Dr. Yakubu Aminu Dodo
*GREM, MyCREST MAARICHES
Istanbul Gelisim University, Istanbul Turkey
Moderator*

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Influence of Urban Recreational Facilities Quality on Domestic Urban Tourists Patronage of Parks in Abuja City, Nigeria

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Abstract:

Quality of facilities in urban parks are essential to tourism development in cities. Ironically, the state of facilities in urban parks are often not accorded adequate academic attention in some developing countries including Nigeria. Thus, this paper examines the effect of parks facilities quality on patronage of urban tourists in Abuja. Four parks namely: Millennium Park, Magic Land, Jabi Lake Park, and Tobix Garden were chosen for this study. 500 questionnaires were administered to domestic tourists who were conveniently selected in the parks and 320 questionnaires were filled and returned. Firstly, frequency of visit was determined, then the quality of facilities was measured, and followed by the effect of facilities quality on tourists' patronage using descriptive analysis and chi-square analysis in SPSS version 20. The finding of this study revealed that majority of tourists visit the parks once in a week. While majority of the tourists rated the facilities in the parks to be of high quality, in good condition, only the toilets were rated negatively low. Furthermore, the findings of the study indicate that only walkways and access roads significantly and positively influence patronage of parks, while poorly maintained toilets significantly and negatively influence patronage of parks in Abuja city. The paper recommends that all facilities in parks in Abuja city should be properly and regularly maintained to enhance increased patronage.

Keywords: Tourism development, Urban Park, Facilities, Patronage, Abuja.

BACKGROUND OF THIS RESEARCH

In today's dynamic and rapidly changing digital world of all-round social changes primarily led by the scientific and technical progress, everyone needs time for recreation, which can be understood as the activity a person takes part in for pleasure or relaxation rather than as work (Elegbeleye, 2005). The desire to seek rest in form of leisure is often sought by both international and domestic tourists all over the world, and this is one among many reasons' tourists visit recreational parks. This desire can be well fulfilled if a destination provide quality facilities and are made attractive. The attractiveness of a tourism destination is often referred to the opinions of visitors about the destination's perceived ability to satisfy their needs. Research has shown that attractiveness studies of a recreational and tourists' destination are necessary for understanding the elements that encourage people to travel (Formica, 2002).

The tourism sector offers numerous and diverse opportunities. According to Tahiri and Kovaci, (2017), an individual's selection of the type of holiday depends on their level of education, and income, their environment, interest in culture, living standard and perceived image of the destination in terms of quality of facilities. The assessment of quality of facilities in a tourists and recreation area should be able to look into the examination of aspects such as: aesthetics, cleanliness, safety, general conditions of the site (Cavnar, Kirtland, Evans, Wilson, Williams, Mixon, and Henderson, 2004; Saelens, Frank, Auffrey, Whitaker, Burdette, and Colabianchi,

2006) and social environment within a recreational facility, all of which were found to influence facility use (Ries, Gittelsohn, Voorhees, Roche, Clifton, and Astone, 2008).

Quality is well known as the fundamental determinant that contributes to the success and failure of the service sector (Tabaku and Cerri, 2016; Yusof and Rahman, 2011). Ekinci, Prokopaki, and Cobanoglu (2003) and Akbaba (2006) noted that measurement of quality has been a complex task and has received considerable attention from researchers over the past three decades, thereby causing serious debate in the extant literature about the most acceptable way to conceptualize it. An appealing quality of service often referred to as intangible characteristics provided to tourists tends to develop satisfaction among tourists, enhances the re-visitation rate and generates more income for the destinations (Baksi, 2014; Kwok, Jusoh, and Khalifah, 2016). As important as the tangible aspect of tourism and recreational sites facilities quality measurement is, the concentration of research has been on intangibles characteristics. Thus, in an attempt to bridge this gap, this paper examines the effect of facilities quality on urban tourists' patronage of parks in Abuja city.

RESEARCH METHODOLOGY

A quantitative research paradigm was considered for this study and therefore, a survey research design through the use of questionnaires was used to collect data in four selected urban parks in Abuja city in Nigeria. These parks are Millennium Park, Magic Land, Jabi Lake Park, and Tobix Garden. 500 questionnaires were administered to domestic urban tourists who were in Abuja from other cities in Nigeria for leisure and holidays. These tourists were conveniently selected in the parks and the questionnaires were administered over a period of two months. Because some of the questionnaires were given to the tourists to fill, only 320 administered questionnaires were retrieved, thereby yielding a return rate of 64%. Analysis of questionnaire commenced with data screening for outliers, thereafter, the data was subjected to descriptive analysis (frequency distribution), and chi-square analysis in SPSS 20, and the results were presented in tables.

RESEARCH FINDINGS AND DISCUSSION

In this section, the first analysis result presented is number of visitation to parks by urban tourists weekly. As reported in table 1, it is evident that majority of tourists (64.7%) visit parks in Abuja city once in a week and very few tourists (3.1%) visit the parks three times in a week. The table also show that 31.3% of urban tourists visit the selected parks twice in a week and no tourist's takeout time to visit the parks four and five times a week. The relatively low frequency of patronage is not surprising for tourists as they often have planned numerous activities in any urban centre, and would want to visit all places of choice during a leisure trip, and because of time constraint, a repeat visit to any park is often difficult during their stay.

Table 1. Number of Visitation to Parks per Week

Number of Visitation Frequency	Percent (%)
Once	64.7
Twice	31.3
Three Times	3.1
Four Times	0
Five Times	0
Total	100

Source: Authors Field Work, 2017

The second analysis result is presented in table 2. According to the table, majority (82.8%) of urban tourists who visited the selected parks are satisfied and impressed with the condition of the playground as a significant number rated them to be in good condition. This connotes that

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the existing playgrounds are well maintained and spacious enough to accommodate visiting tourists conveniently. The condition of sport facilities in the parks from the view point of visiting urban tourists indicates high level of commendation as they are rated positively high by majority (83.1%) of them, implying that they are well maintained.

In terms of the condition of the available toilet facilities in the parks, 54.7% of tourists rated them positively and 46.3% rated them negatively low. While it will not be out of place to note that a significant number of sampled tourists appreciate the condition of the toilet facilities, results show that there are many tourists who are displeased with the condition of the toilets. Scenario of this nature is capable of discouraging tourists from visiting the selected parks in addition to reducing time spent in the parks for relaxation.

Table 2. Quality of Facilities in Selected Parks in Abuja

Facilities	Frequency	Percentage (%)
Playgrounds		
(i) Very Poor	5	1.6
(ii) Poor	4	1.3
(iii) Fair	46	14.4
(iv) Good	119	37.2
(v) Very Good	147	45.6
Sport Facilities		
(i) Very Poor	12	3.8
(ii) Poor	42	13.1
(iii) Fair	91	28.4
(iv) Good	118	36.9
(v) Very Good	57	17.8
Toilet Facilities		
(i) Very Poor	71	22.2
(ii) Poor	70	21.2
(iii) Fair	82	25.6
(iv) Good	80	25.6
(v) Very Good	17	5.3
Picnic/Barbecue Areas		
(i) Very Poor	7	2.2
(ii) Poor	6	1.9
(iii) Fair	48	15.0
(iv) Good	117	36.6
(v) Very Good	142	44.4
Flowerbeds		
(i) Very Poor	6	1.9
(ii) Poor	5	1.5
(iii) Fair	68	21.2
(iv) Good	108	33.8
(v) Very Good	133	41.6
Walkways		
(i) Very Poor	2	6
(ii) Poor	7	2.2
(iii) Fair	62	19.1
(iv) Good	108	33.8
(v) Very Good	141	44.1
Access Roads		
(i) Very Poor	1	3
(ii) Poor	4	1.3
(iii) Fair	53	16.6
(iv) Good	96	30
(v) Very Good	166	51.9

Source: Authors Field Work, 2017

Taking the picnic and barbecue areas of the parks into consideration, majority (81%) of the sampled tourists were delighted with their experience when they were in close contact with this attraction, which contributed to the positive high rating of the attraction. Additionally, the flower bed areas of the park were also rated positively high as over 70% of tourists appraised them commendably. This implies that the management of the selected parks are constantly engaging their gardeners to maintain the flower beds regularly, which is pertinent in keeping any park alluring.

As for the walkways that is also refer to as pathways, 77% of tourists opined that they are well laid out, clean and in good condition; making them appear convenient for easy walk around the parks to all places of attraction. Furthermore, an appraisal of the state of access roads to the parks shows that they are not in deplorable as majority (81.9%) of tourists are satisfied with their condition.

Effect of Facilities Quality on Visitors Patronage

Table 3 present the result of the relationship between facilities quality and frequency of tourists' patronage of urban parks in Abuja city. From the results, it is evident that only three out of the seven facilities examined significantly influence tourist's patronage. These facilities are toilets, flower bed, and access roads. This result emphasized the significance of good access roads and transportation service and agree with the position of Reigner, Kiser, Lawson, and Manning (2012), which established that providing vital and high-quality transportation services to visitors in parks is an important component of managing parks and recreation areas. Chi-square results show that the condition of playground, sport areas, picnic/barbecue areas and walkways does not significantly influence patronage of parks in Abuja city, but the condition of toilets, flower beds, and access roads do. While the results show highly negative significant effect (17.116, -0.002**) of condition of toilets on tourists' patronage of the parks, the condition of flower beds and access roads significantly and positively (9.562, 0.05* and 9.313, 0.05*) influence tourists patronage of the parks.

Table 3. Chi-Square Analysis of the Relationship between Quality of Facilities and Tourists Patronage of Urban Parks in Abuja City

Facilities in Parks	Frequency of Visit (Chi-Square Test)	Sig. Level	Decision
Playgrounds	1.995	0.737	Not significant
Sport Areas	3.732	0.443	Not significant
Toilets	17.116	-0.002**	Highly significant
Picnic/Barbecue Areas	1.909	0.752	Not significant
Flower Beds	9.562	0.05*	Fairly significant
Walkways	8.529	0.74	Not significant
Access Roads	9.313	0.05*	Fairly significant

Note: P < 0.05*, P < 0.01**, P < 0.001***

Source: Authors Field Work, 2017

CONCLUSION AND RECOMMENDATIONS

The study set out to investigate the effect of condition of facilities in urban park on tourists' patronage since the quality of facilities is an essential and critical aspect of tourism development in any destination. This is because the condition of facilities somehow have a direct and indirect relationship with tourists' experience. From the foregoing findings and discussion, it is evident that the available facilities examined are well put to use and are currently enjoying some level of patronage. Facilities such as the sporting equipment's, playground areas, picnics and barbecue areas, and walkways are in good condition and appreciated by tourists, while the toilets facilities are not well maintained, which is worrisome

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as it has potential of making the experience of tourists unfulfilling and can also affect repeat visit intention. Thus, the study recommends that all facilities particularly the toilets in the parks in Abuja city should be properly and regularly maintained to enhance increased patronage.

REFERENCES

- Akbaba, A. (2006). Measuring service quality in the hotel industry: A study in a business hotel in Turkey. *International Journal of Hospitality Management*, 25, pp. 170–192.
- Baksi, A. K. (2014). Moderating impact of tourism relationship management dimensions on tourism service quality, tourist satisfaction and destination loyalty. *Decision Science Letters*, 3, pp. 169–186.
- Cavnar, M. M., Kirtland, A. K., Evans, H. M., Wilson, K. D., Williams, E. J., Mixon, M. G., and Henderson, A. K. (2004). Evaluating the quality of recreation facilities: development of an assessment tool. *Journal of Park and Recreation Administration*, 22(1), pp. 96 – 114.
- Ekinci, Y., Prokopaki, P., and Cobanoglu, C. (2003). Service quality in Cretan accommodations: Marketing strategies for the UK holiday market. *International Journal of Hospitality Management*, 22(1), pp. 47–66.
- Elegbeleye, S. O. (2005). Recreational facilities in schools: A panacea for youths’ restiveness. *Journal of Human Ecology*, 18(2), pp. 93-98, DOI: 10.1080/09709274.2005.11905814
- Formica, S. (2002). Measuring destination attractiveness: A proposed framework. *Journal of American Academy of Business*, 1(2), pp. 350–355
- Reigner, N., Kiser, B., Lawson, S., and Manning, R. (2012). Using transportation to manage recreation carrying capacity. *The George Wright Forum*, 29(3), pp. 322–337.
- Ries, A. V., Gittelsohn, J., Voorhees, C. C., Roche, K. M., Clifton, K. J., and Astone, N. M. (2008). The environment and urban adolescents’ use of recreational facilities for physical activity: A qualitative study. *American Journal of Health Promotion*, 23(1), pp. 43–50.
- Saelens, B. E., Frank, L. D., Auffrey, C., Whitaker, R. C., Burdette, H. L., & Colabianchi, N. (2006). Measuring physical environments of parks and playgrounds: EAPRS instrument development and inter-rater reliability. *Journal of Physical Activity and Health*, 3(1), pp. 190–207.
- Tabaku, E., and Cerri, S. (2016). An assessment of service quality and customer satisfaction in the hotel sector. *Tourism & Hospitality Industry 2016, Congress Proceedings*, 480–489.
- Tahiri, A., and Kovaci, I. (2017). Assessment of the quality of products in tourism. *European Journal of Multidisciplinary Studies*, 2(5), pp. 62 – 72.
- Yusof, N. A., and Rahman, F. A. (2011). Tourists’ perceptions of service quality in a lake-based tourism area. *IPEDR*, 16, pp. 84–89.