

## **An Assessment of Open Market Goods Display on the Surrounding Landscape of Jos City Centre, Nigeria.**

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### **ABSTRACT**

*The main thrust of this paper is to assess the impact of open market goods display on the surrounding landscape of Jos city centre. Field surveys by questionnaire and interviews were the main tools of data collection while Secondary data were collected from relevant literatures. Purposive random sampling technique was used to select 332 traders along the streets. Data collected were analyzed using descriptive statistics i.e. Statistical Package for Social Science (SPSS) version 22 to determine the characteristics of the traders and the impact of open market goods display on the surrounding landscape. A total of 144 questionnaires were distributed to traders. Only 100 of the questionnaires were retrieved representing 69.44%, 17 not clearly filled and 27 was not retrieved. The study observed that majority of the traders were within the age of 21-30, predominantly male, most of whom are single, and majority possess either secondary education or National Diploma/National Certificate in Education. It was observed that encroachment of the major roads by traders was found to lead to traffic congestion and accidents, abuse of social amenities, air pollution, sanitary problems and armed robbery among others. Items offered for sale vary from second hand clothes, shoes, fruits to electronics. Recommendations include; enforcement of governments policies on street trading in the city, provision of more trading shops and stalls, provision of sustainable waste management machinery, and checking trade related problems and encroachments into roads.*

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**KEYWORDS:** *Assessment, City Centre, Goods Display, Open Market, Surrounding Landscape*

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### **1.0 INTRODUCTION**

#### **1.1 BACKGROUND TO THE STUDY**

A market is any structure that allows buyers and sellers to exchange any type of goods, services and information. The exchange of goods or services, with or without money, is a transaction (Obe, Omole, Okosun, Ayo-Odifiri, & Omokhafa, 2017). Markets are man-made features established for the use of man (Omole, 2009). Contextual to this paper, a market is

described as an authorised space with or without buildings used for trading and commerce, whereby the buyers and sellers meet at specified places and time or at a time set within a certain interval (Oluwole, Oluwaseun & Oluwafemi, 2017). It can also be referred to as a medium that allows buyers and sellers of a specific good or service to interact in order to facilitate an exchange. This type of market may either be a physical marketplace where people come together to exchange goods and services in person, as in a bazaar or shopping center, or a virtual market wherein buyers and sellers do not interact, as in an online market ([www.investopedia.com/terms/m/market.asp](http://www.investopedia.com/terms/m/market.asp), 2019).

More so, to be a bit specific, an *open market* is a free market in which buyers and sellers can do business without barriers such as tariffs, unfair licensing requirements, subsidies, arbitrary taxes, unionization and other regulations that favor some businesses and people and hinder others (marketbusinessnews.com). Markets play a vital role in the economic life of the people, and they are essential in the chain of commodity distribution (Adeyinka, Kuye, & Agbabiaka, 2016). In the cities, markets are the unquestionable platforms for obtaining basic needs like food and clothing (Emmanuel, & Humphrey, 2014). The existence of markets in any city is expedient due to the fact that commercial activities are the back-bone of several economies.

Market centres are fundamental to the economic, social, cultural, religious and political life of people (Obe, et al., 2017). It is believed in many quarters that markets grow anywhere, there are goods to sell and where buyers are available for such goods, Omole's study cited in (Obe, et al., 2017). In Nigeria, there are two types of markets; traditional and modern. They hold daily or periodically on specific days (Oluwole, et al., 2017).

Landscaping is an integral part of our culture and plays an essential role in the quality of our environment, economic wellbeing of the people, as well as their physical and psychological health. It is a way of maintaining and enhancing the quality of human life by protecting the health of the biosphere and husbanding the key resources of the air, water, land and minerals. (Adekunle, & Basorun, 2016). Landscape is one of the most cost effective tools for improving and sustaining the quality of the environment whether in the school environment, the city, the suburbs or the country (Adekunle, et al., 2016).

In Jos Metropolis, the destruction of the Jos main market by a mysterious fire in February, 2002; further destruction of the main market by more than one Boko Haram bomb blast later in 2014; attempted efforts by the former Governor to relocate the traders to satellite markets on the outskirts of the city like Rukuba, Bukuru, and Faringada satellite markets but the traders refused to go and opted to instead build makeshift shops around the rubble of the burnt market ([thenationonlineng.net/jos-upon-model-market/](http://thenationonlineng.net/jos-upon-model-market/), 2018) has turned the market site in Terminus Jos to clusters of shops erected by traders at the foot of the now ruined market while other traders take on the streets to display their wares for sale and contest the use of the road with vehicles ([thenationonlineng.net/jos-upon-model-market/](http://thenationonlineng.net/jos-upon-model-market/), 2018).

Currently, about 70% of buying and selling take place in Terminus within the vicinity of the main market. The market that was a tourist attraction in Jos is now a nightmare to the government and citizens alike as the ruined stores serve as hideouts that provide accommodation for criminals in the city; drug addicts, robbers, rapists' etcetera ([thenationonlineng.net/jos-upon-model-market/](http://thenationonlineng.net/jos-upon-model-market/), 2018). The skeleton of the ruined market stands tall and its stores serves as bunks that provide accommodation for all manners of criminals in the city. Now even amorous activities

take place at night in the night. The edifice is also a den for rapists. Several teenage girls have been lured there and attacked. It is also a hide-out for armed robbers who converged there to plan and attack innocent citizens. Parts of the market have been converted to refuse dumps, some other parts used as public toilet by traders ([thenationonline.net/jos-upon-model-market/](http://thenationonline.net/jos-upon-model-market/), 2018).

A reconnaissance survey carried out reveals how open market goods display is virtually becoming common place involving everybody ranging from the young and the old, men and women, the educated and the illiterate, all irking to earn a living through the practice (Author's survey, 2019). Subsequently, various preliminary surveys carried out on the roads, areas and land marks within the city centre (Ahmadu Bello Way/Murtala Muhammed Way/Rwang Pam Street, Jos) reveals unprecedented spread of market goods displayed openly in wheel barrows, carts while others hang their commodities on walls of buildings, trees, fences. It manifests in indiscriminate occupation of public space in defiance of formal planning and land use arrangements, an eye sore on aesthetic appearance of ambient buildings, surrounding landscape with little regard for intrinsic beauty and suitability, impediments to free flow of pedestrian and motorized traffic and congested transportation networks, zoning problems and land use conflicts (Author's survey, 2019).

In Nigeria there are studies that has received considerable attention in literature on markets, most of the studies have examined the economics of Decentralization of Markets and Environmental Sanitation Scheme (Alexander, et al., 2012); Nature and Effects of Street Trading in Maiduguri Metropolis, Borno State (Waziri, & Umar, (n.d.); Assessment of Market Facilities and Locational Effects on Adjoining Neighborhoods in Nigerian Urban Centers (Adeyinka, et al., 2016); Urbanisation and Market Growth Trends in the Yaounde Metropolis (Emmanuel, et al., 2014); Assessment of Urban Market Renewal Projects on the Development of Akure (Obe, et al., 2017); Assessment of environmental sanitation behaviour of market traders in selected markets in Ibadan, Nigeria (Oluwole, et al., 2017). However there are little or no known studies to assess open market goods display on the surrounding landscape within Jos City Centre. This study therefore intends to fill the gap that exists. The study is aimed at assessing open market goods display on the surrounding landscape in Jos City Centre. The specific research objectives are to: assess the impact of open market goods display on the surrounding landscape; determine the impact of open market on traffic movement both (Pedestrian and Vehicular); determine the impact of goods display on the beauty of the environment.

In realizing this goal, the following research questions were raised:

- i. How has the display of goods affected the surrounding landscape?
- ii. What is the most common impact of goods displayed on traffic movement?
- iii. How has open market affected the beauty of the surroundings?

These brought about the following hypothesis:

- i. The null hypothesis [**H<sub>0</sub>**] state that open market goods display has no significant effect on the aesthetics of the surroundings.
- ii. The alternative hypothesis [**H<sub>1</sub>**] states that open market goods display has significant effect on the aesthetics of the surroundings

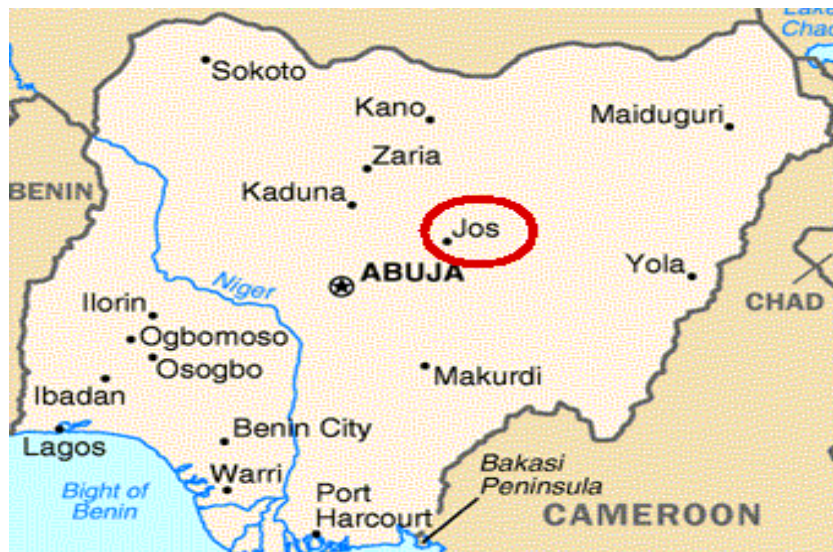
The study was carried out through desktop research methods; these include searching for relevant documents and research articles from peer reviewed journals over the internet, gathering and collating relevant information from published and unpublished articles, consulting journals

database resources like the Hinari initiatives and others freely available on the internet. Information gathered were reviewed, discussed and presented descriptively with appropriate recommendations and conclusion.

## 1.2 Background of Jos

Jos is a town that its background and growth dates back to the early 19th century and also its commercial and cosmopolitan ascendancy is as a result of the mining activities in Tin and Columbite in its general area (Oko, 2016). The town is also a terminal for railway line. At the outskirts, is an international airport, the Yakubu Gowon International Airport at Haipang. Through all these periods there have been steady and continuous increase in human population, businesses, buildings and other paraphernalia of urbanization including cars busses, trucks and articulated vehicle as major means of transportation within the city (Oko, 2016).

Jos is situated at about N9°55'48" and E8°53'24" in the Nigerian middle belt (see Figure 1). The city is situated at the northern edge of a pear-shaped upland known as the Jos Plateau. This upland stretches for approximately 104km. from north to south, and 80km from east to west covering an area of about 8,600km<sup>2</sup> or 860,000 hectares. It maintains an average height of 1200m (4000ft) above sea level peaking at about 1766m (5829ft) in the Shere Hills. The state has about 17 Local government areas (LGAs) (see Figure 2). (Archives of National Centre for Remote Sensing Jos, 2007).



**Figure 1:** Plateau State in National context  
Source: <http://www.plateaustategov.org/visit/jos.html>

Jos city has an equable climate with average monthly temperatures ranging between 21° and 25° C (69° and 77° F), average humidity of 60% and average annual rainfall of 1,400mm (56"). Jos falls within the tropical savannah region and as with most parts of the tropics, has two major seasons based primarily on the basis of rainfall and humidity levels. The two seasons are the rainy and dry season (harmattan season) characterized by the dominance of the moisture





dealing on sundry items like building materials, clothes, books/ stationery, computers, accessories and repairs, restaurants, household items, mobile traders and hawkers (Oko, 2016).



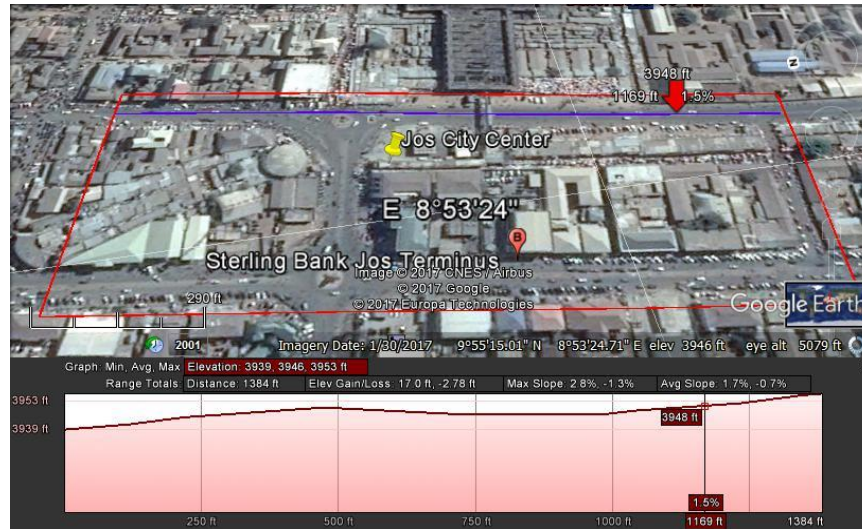
**Plate 1:** Photographic view of Ahmadu Bello way-Beach road, in the City Centre of Jos.  
Source: Field Survey, 2019



**Plate 2:** Photographic view of Murtala Mohammed Way, in the City Centre of Jos.  
Source: Field Survey, 2019.

#### **1.4 Site Area and Shape**

The Google Earth image, 2017 shows that the site is rectangular-shaped flanked by busy streets where commercial activities take place (see Figure 3). Pedestrian lanes also make it accessible to pedestrians.



**Figure 3: A Cross Section of Jos City Centre**  
Source: Google Earth Map, 2017.

## 2.0 LITERATURE REVIEW

### 2.1 Concept of markets

Markets play a vital role in the economic life of the people, and they are essential in the chain of commodity distribution (Adeyinka, et al., 2016). A market could therefore be referred to as an authorized and physically defined location where people meet to engage in business transactions at a defined time (Oluwole, et al., 2017). The existence of markets in any town or city is expedient due to the facts that commercial activities are the back-bone of several economies. Markets could be categorized as traditional or modern, based on factors such as goods sold, services provided, and location, period of operation, physical settings among others (Adeyinka, et al., 2016). The authors further recognized that the rapid growth of urban centres has generated management problems. The most important of these problems are encroachment of the open spaces environment and health issues including solid waste management, water supply, housing, traffic congestion and water pollution.

### 2.2 Impact of open markets on urban landscape

Cities have certain familiar overall urban landscape forms or patterns which they become associated with and thus formed their imagery (Adamu-Tal, Qurix, Ma'aruf, & Uji, 2017). That is, those features or elements that gives the urban landscape its legible visual imagery. Landscape are an essential part of the environment which includes topography, vegetation and associated plants and soil, water bodies, is one of the most visual needs of people (Igwe, Chinedu, Nlem, Nwezi, & Ezekwu, 2018). However, it can be observed that urban imageability and aesthetics can be defaced, damaged or deformed irreversibly in many ways by the activities of street commercial operators.

In a research conducted by Adamu-Tal, et al., (2017) in Jos City Centre, Plateau State, Nigeria, the urban imagery of the city centre of Jos suffers from activities of street commercial sector activities. Teeming population of youths are found on busy intersections, around the Jos main market and transport depots selling a variety of goods and wares such as household items,

electronic gadgets, imported used clothes, food stuffs, bags and various footwear just to mention a few. The imageability of urban form such as buildings are defaced, distorted, chaotic and therefore, made illegible by physical attributes of urban street commercial activities. The city's landscape and aesthetic appeal are now in ruins.

Further preliminary survey in the study area also shows how these commercial activities has generated management problems, such as encroachment of open spaces and roads, dumping of refuse on median strip road, blocking of limited car parking space, haphazard development of ramshackle structures, blockage of drainages, traffic congestion along major roads, environmental deterioration including air pollution, noise pollution, flooding, arm robbery. (Author's survey, 2019).

### **2.3 Impact of open markets on traffic movement**

Adeyinka, et al., (2016), confirmed that the encroachment of the open spaces by markets and service industries as one of the greatest problems confronting Nigerian urban centres. It has been established that there is the need to understand that particularly in Nigeria, several markets are poorly planned or not planned at all. Most markets developed in a haphazard manner in close proximity with major roads, and in this regard, they tend to hinder the free flow of traffic which invariably disrupts the urban functionality and aesthetic qualities.

Currently, about 70% of buying and selling take place in Jos city centre (Terminus) within the vicinity of the burnt main market. Traders take on the streets to display their wares for sale and contest the use of the road with vehicles resulting to insufficient circulation space and traffic management measures, leading to vehicular and pedestrian congestion (Author's survey, 2019).

### **2.4 Impact of goods displayed and the environment**

In Nigeria the rapid population growth resulting in high rate of unemployment, growing inflation, low wages, deplorable working conditions and endemic poverty have contributed to growing incidents of street trading as individuals struggle to maintain their families (Waziri, et al., (n.d.)). The social and economic benefits derived from markets are numerous. However, several environmental challenges are attributed to buying and selling in market places. Large quantities of solid wastes are generated from market places (Oluwole, et al., 2017). The heaps of refuse provide excellent breeding grounds for vectors of communicable diseases including rodents and insects. They may also pose fire hazards apart from being eyesores and sources of unpleasant odour traffic congestion because traders congregate at point along the roads (Oluwole, et al., 2017).

Traffic congestion is another problem attributed to the narrowing of the width of traffic lanes as a result of the spread of market goods and exposure to traffic accidents that most often results in injury and death. Splitter Island of the road meant for the planting of trees, hedges and shrubs now serves as spots for accumulation of solid wastes causing air pollution and unhygienic conditions for users and passers-by. Drainage channels are blocked leading to flooding during heavy rainfall (Orewere, et al., 2019).

## **3.0 RESEARCH METHODOLOGY**

The study employed the use of two data sources which were primary and secondary data. The primary data used were questionnaires, oral interview and the use of digital camera to capture



images of interest to the study, while the secondary data used include, published materials such as books, academic and professional journals, published information, article, dissertations and geographical maps of Nigeria, Plateau State. The Google imageries of the study areas were acquired, and a reconnaissance survey and ground trothing operation was carried out to ascertain the impact of open market goods display.

### 3.1 Sample Size

The shops at Terminus are fully utilized beyond capacity. A total population of 850 Shop owners with 1110 vendors.

To determine the proportion of questionnaires to be administered in the commercial centre, Yamane (1967) formula for sample size was used. The formula given as:

$$SS = \frac{N}{1 + N(e)^2}$$

Where:

SS = Sample Size

N = Total population under study

e = Acceptable error size usually 0.05

That is,

$$SS = \frac{1960}{1 + 1960(e)^2}$$

SS = 332

Sample Size is ascertained as calculated to be 332

In the backdrop of all calculation done, to obtain the proportion of questionnaire to be administered in the respective selected shops, the same Yamane (1967) formula was used as shown below:

$$\frac{n \times SS}{N}$$

n = Total population of shops

N = Total population of the entire area under study.

SS= Sample Size.

$$\frac{850 \times 332}{1960}$$

Proportion of questionnaire to be administered= 143.97 ≈ 144

### 3.2 Questionnaires

A total of 144 questionnaires were handed out to shop/stall owners and 100 were retrieved, recording a response rate of 69.44%. Traders were selected on shop/stall by purposive random sampling technique. Purposive sampling is the selection of a subset of individuals from within a statistical population to estimate the characteristics of the whole population. Two advantages of sampling are that the cost is lower and data collection is faster than measuring the entire

population. The first shop/stall surveyed in each street was randomly selected and subsequent unit of investigation was every 3<sup>rd</sup> shop/stall. The questionnaires were structured in four main sections which include

- A - General Background and information of the respondent
- B - Impact of open market goods display on the surrounding landscape.
- C - Impact of open market on traffic movement (Pedestrian and Vehicular).
- D - Impact of goods display on the beauty of the environment.

### 3.3 Statistical Analysis

The data obtained was subjected to descriptive statistics using charts (pie and bar chart) using Statistical Package for Social Science (SPSS) version 22.

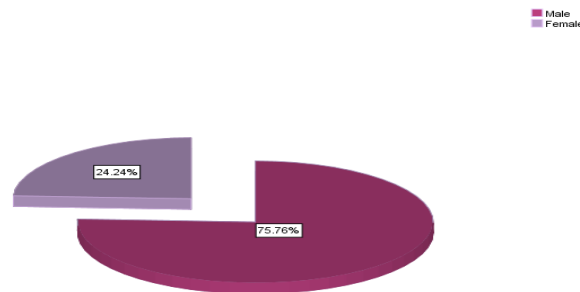
## 4.0 RESULTS AND DISCUSSIONS

This section gives in detail information gotten from data analysis in order to achieve the aim of the research. Findings from this study are as follows:

### Background information of the Respondents

#### 4.1 Sex Distribution

The results for gender of respondents of various socio-demographic characteristics is displayed in Figure 4 below. The result shows that 75.76% of the respondents were male while 24.24% were female. It shows clearly that more male respondents took part than female respondents. This may owe to the dominant role that men play in Africa where he is considered the head of the household and makes decisions.

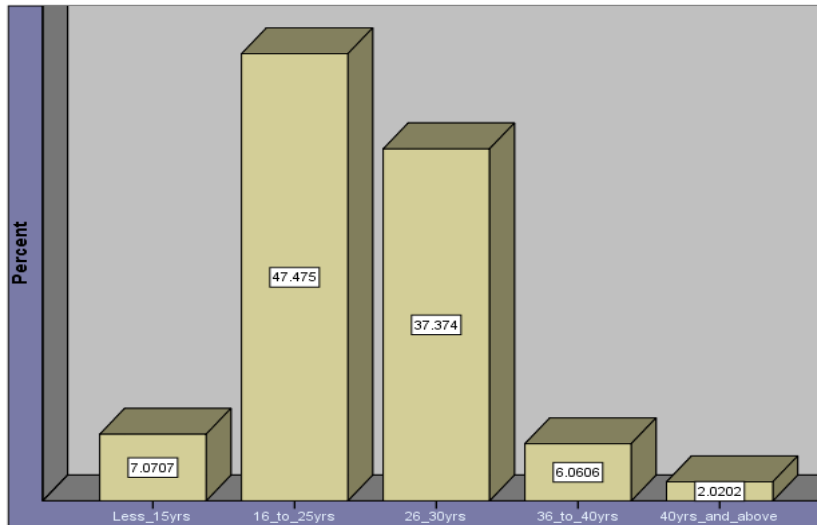


**Figure 4:** Gender of respondents  
Source: Graphing by Author, 2019.

#### 4.2 Age Group of Respondents

The findings from the survey shown in Figure 5 reveals that 7.1% of the respondents were less than 15years. The age cohort of 16 - 25years represents 47.5% of the total sampled population while those in age group 26 - 30years represents 37.4% , 6.1% of the respondents are within age of 36 - 40years and 2.0% of the respondent are within the age of 46years and above. It can be

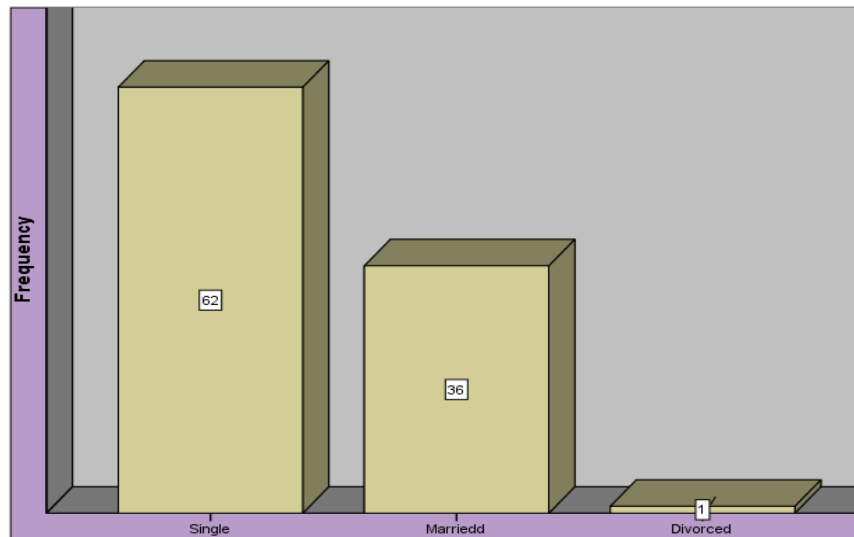
inferred therefore that the bulk of the surveyed population were teenagers and pre-adult population who are expected to be more active in market activities.



**Figure 5:** Age group of respondents  
Source: Graphing by Author, 2019.

#### 4.3 Marital Status

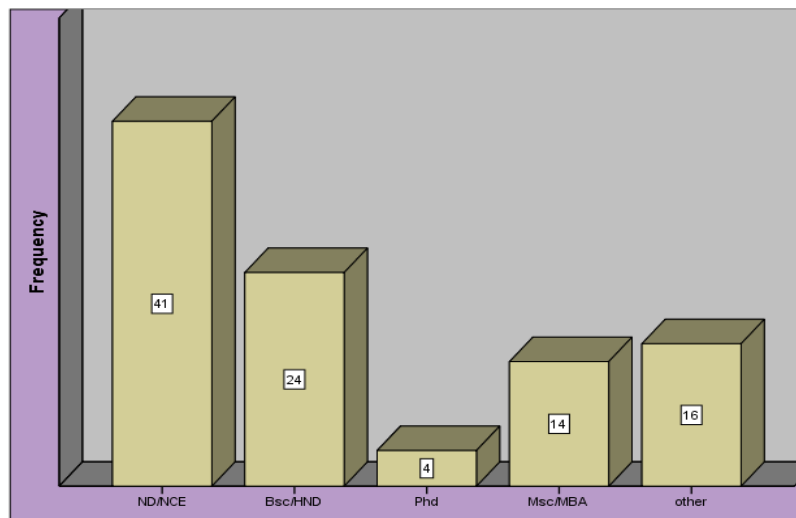
The pattern exhibited in the marital status is expected since a mixed population is under consideration. It is therefore not abnormal to see 62.6% of the entire surveyed population as single or unmarried. Furthermore, 36.4% of this population indicated married status. Only negligible percentage that is, 1% of the population were divorced /separated marital-wise (see Figure 6).



**Figure 6:** Marital status of respondents  
Source: Graphing by Author, 2019.

#### 4.4 Academic Qualification

The educational status of the study population confirmed diversities of educational attainment with 41.4% of the respondents possessing just first degree in either National Diploma/National Certificate in Education. There was a high 24.24% of respondents that possessed Higher National Diploma or Bachelor degree. Respondents that possessed Masters Degrees had 14.14%. On the other hand the numbers of the population with PhD degree was 4.04% while others who do not fall within the four (4) groups had 16.2%. They include students that are still in school or those outside schools working with school certificates or with no certificate. In all, it is important to note that the study areas chosen for this research have indeed shown good level of literacy relatively. As seen in Figure 7 below.

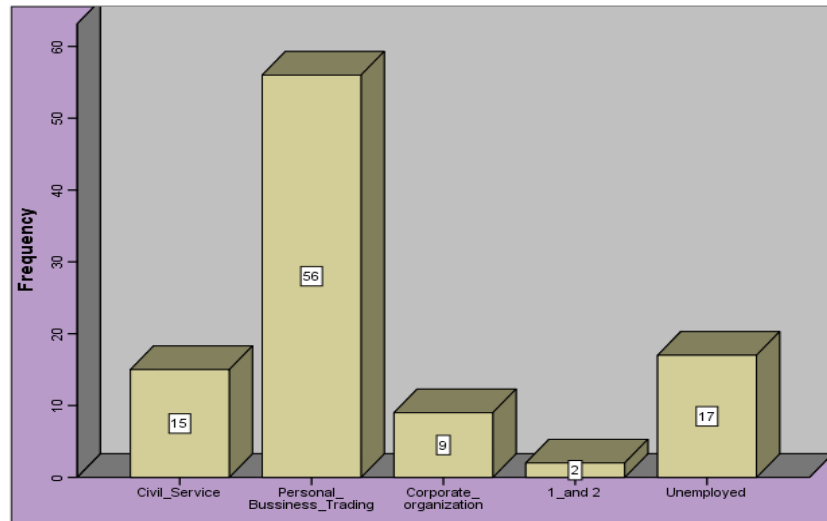


**Figure 7:** Academic qualification of respondents  
Source: Graphing by Author, 2019.

#### 4.5 Respondents Occupation

Figure 8 below reveals the occupation of the surveyed area, in terms of occupation, trading/personal business activity takes the lead with 56.57% , followed by civil service job holders, 15.15%.Corporate private organization employees constitute 9.09%.The unemployed constituted a significant percentage (17.2%) of the total population.

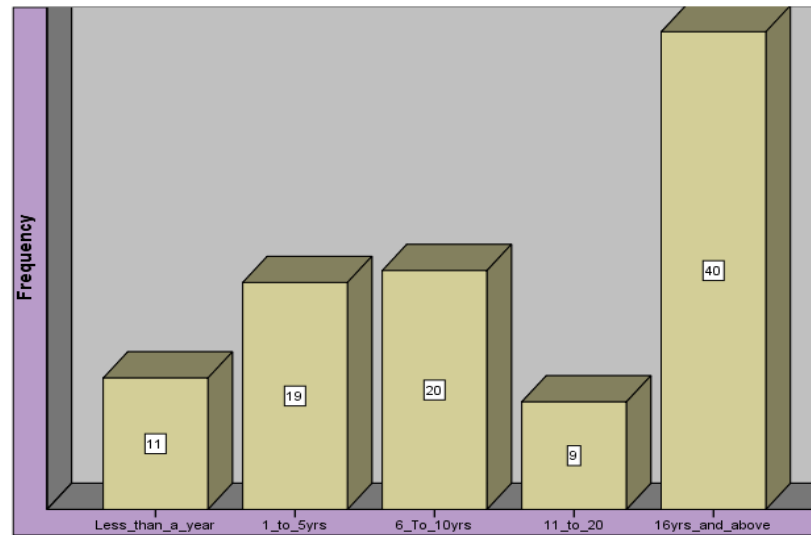




**Figure 8:** Information on the respondents' occupation.  
Source: Graphing by Author, 2019.

#### 4.6 Length of stay of the respondents.

The length of stay in Jos by the respondents as shown in Figure 9 is quite revealing. 40.4% of the respondents have stayed consistently in Jos for more than 16 years and above. Followed by 20.2% of respondents who have lived between 6 to 10 years. Moreover, 19% of the respondents have lived for 1 to 5 years and 9% for those who have lived for 11 to 15 years. 11% or the respondents' have stayed for less than a year. In the researcher's view, residents that have not stayed in the study area for up to one year may not have adequate knowledge of the developmental trend of the place. As it is reflected in Figure 6, the very information needed in this research has been provided by respondents whose length of stay in the city is reasonable long to provide reliable data for the research.



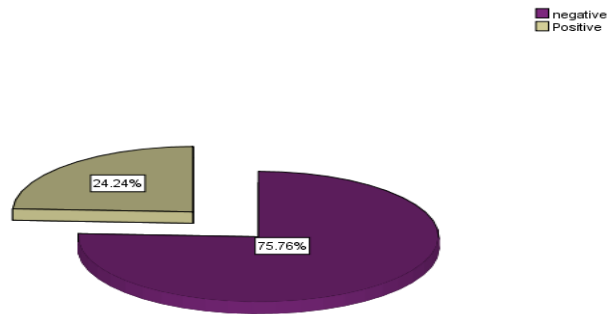
**Figure 9:** Respondents' number of years in Jos.

Source: Graphing by Author, 2019.

#### 4.7 Impact of open market on the surrounding landscape

From the view point of the research objective 1, it is evident that 75.76% of respondents claimed the urban imagery of the city has changed negatively. While 24.24% of the respondents have positive perception on impact of open market goods display as a result of the benefits accruing from sales of goods as seen in Figure 10.

Plate 3a, 3b, 4 & 5 below reveals similar findings reported by Waziri, et al., (n.d.). The nature of the encroachment was observed by measuring road width, set back from building line, the extent of the display of goods and items towards the edge of the road, nature of business and time of business. It was observed that goods are displayed right on to the edge of the road. Electric poles and street side gutters and storm drains are incorporated into the extensions.



**Figure 10:** Impact of open market on the surroundings

Source: Graphing by Author, 2019.



**Plate 3a & 3b:** Open market goods display on surrounding landscape of the city centre in Jos.  
(Ahmadu Bello way road)  
Source: Field Survey, 2019.



**Plate 4:** Sale of detergents in a wheelbarrow  
(select)  
on the main road of Ahmadu Bello way  
Source: Field Survey, 2019.

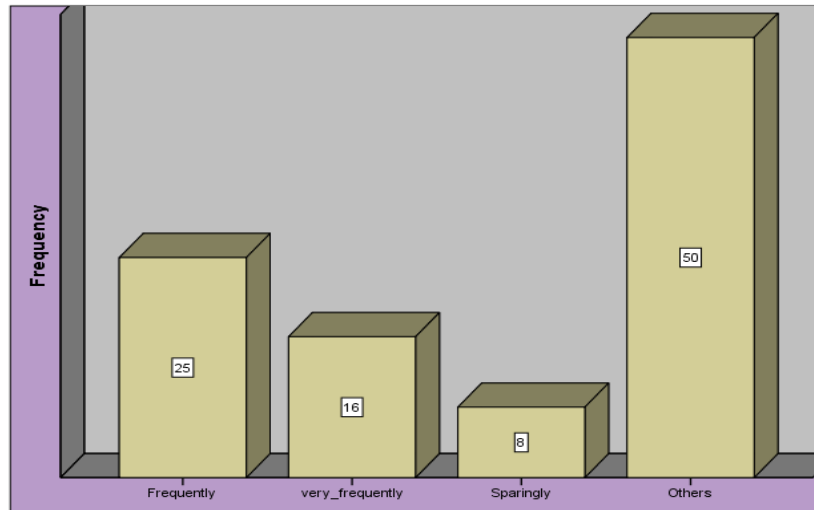


**Plate 5:** Sale of second hand ware (bend-down-select)  
on the main road of Ahmadu Bello way  
Source: Field Survey, 2019.

#### **4.8 Frequency of accidents occurring due open market goods display**

From the view point of the research objective 2, the focus in this section is to ascertain the frequency of accidents occurring in the study area as depicted in Figure 11 and Plate 6 & 7. 25.25% of the respondents agree that accidents occurs frequently; 16.16% of respondents say accidents occurs very frequent; 8.1% affirm that accident occurrence is sparingly while, 50.51% of the respondents indicated others, were rare cases of accidents are caused by the activities of open market traders.



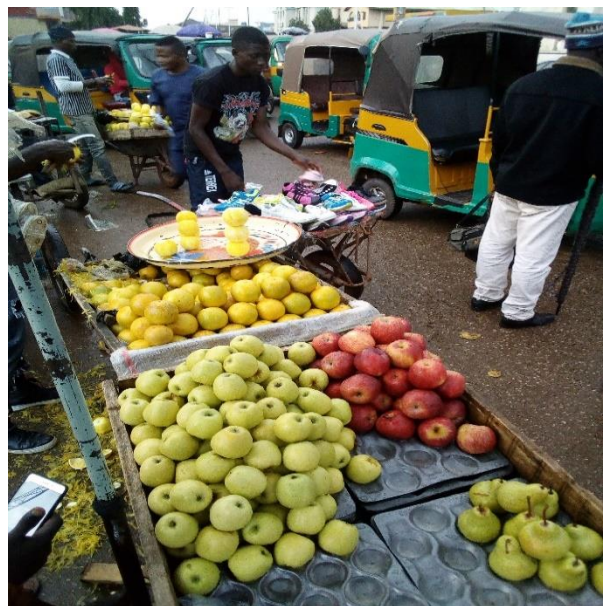


**Figure 11:** Frequency of accidents occurring due open market goods display  
Source: Graphing by Author, 2019.



**Plate 6:** Traders selling footwear on the yield line rider of the main road obstructing vehicular movement fighting

Source: Field Survey, 2019.



**Plate 7:** Collision of fruit sellers and tricycle on Ahmadu Bello way resulting to fighting

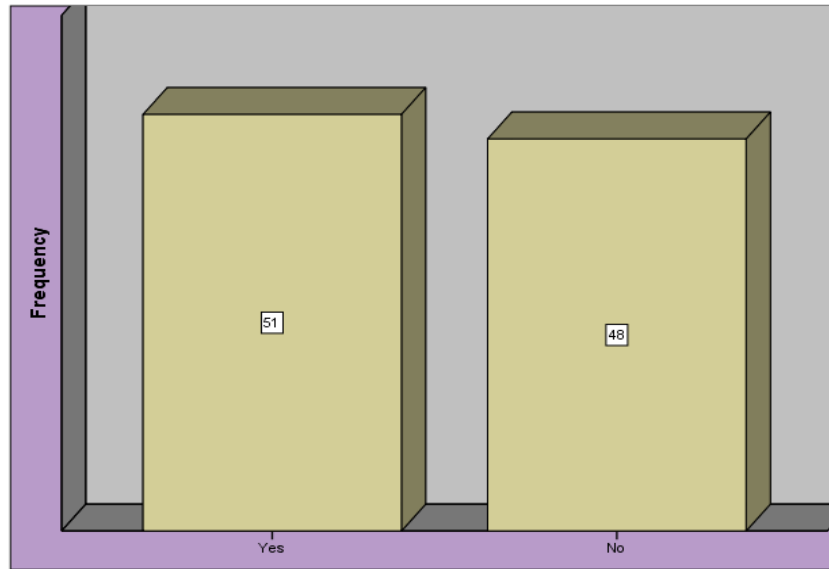
Source: Field Survey, 2019.

#### 4.9 Should Open Markets be stopped?

The investigation on this matter and its implication were verified from respondents through questionnaire administration and direct interview in some selected areas that are acutely affected by this challenge. In Figure 12, 51.52% of the respondents who are the legal shop owner, feel



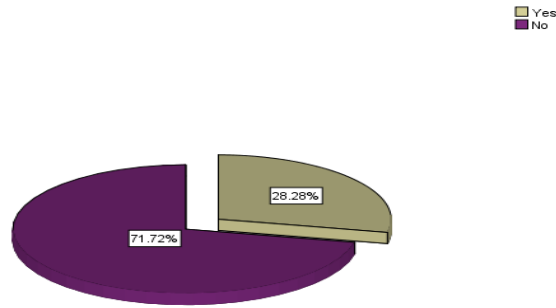
strongly that the open market should be stopped due to the low sales of goods and patronage they witness, because of the obstructions caused by those who are the runners of open market, and increase in the rate of crime. However, 48.49% of the respondents feel that the open market should not be stopped since they are the beneficiaries, and for that they see no negative impact attached to it.



**Figure 12: Should Open Markets be stopped?**  
Source: Graphing by Author, 2019.

#### **4.10 Impact of open market goods display on environmental beauty**

From the view point of the research objective 3, as seen in Figure 13 below it is evident that 71.72% of the respondents were not satisfied with the open market. A few of the reasons cited for the lack of satisfaction include; lack of proper maintenance of the surrounding, trampling on the very few and inadequate softscape elements planted by the ministry of environment, Clogged and blocked drainage, illegal dumping of refuse. 28.28% of the respondents responded positively. Plate 8,9,10 & 11 reveals the pictorial view of the situation.



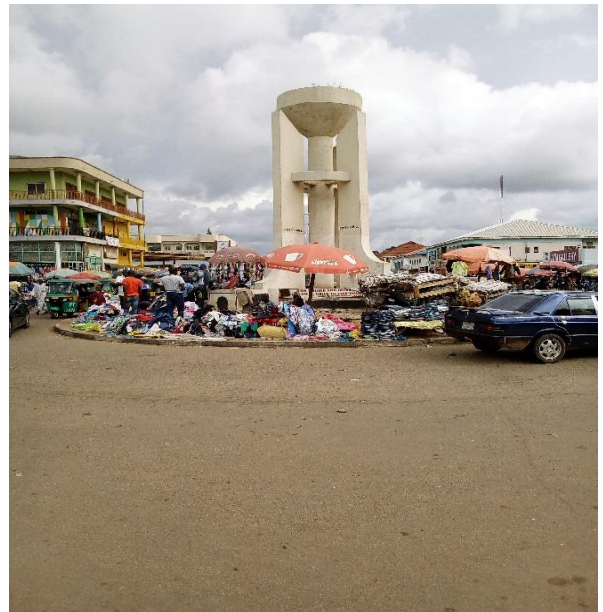
**Figure 13:** Impact open markets goods display on the environment  
Source: Graphing by Author, 2019.



**Plate 8:** Display of clothes on the façade of a shop of

at Terminus Roundabout Ahmadu Bello way, Jos.

Source: Field Survey, 2019.



**Plate 9:** Illegal trading activities on the apron

Source: Field Survey, 2019.



**Plate 10:** Display of bags/goods openly on the facade  
Of the building.

Source: Field Survey, 2019.



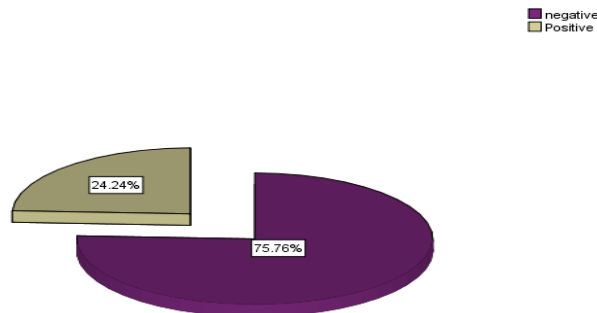
**Plate 11:** Accumulation of solid wastes on  
Island of the road.

Source: Field Survey, 2019.

#### 4.11 Hypothesis Testing

##### Statement of the Hypothesis

- i. **H<sub>0</sub>:** Open market goods display has no significant effect on the aesthetics of the surroundings.
- ii. **H<sub>1</sub>:** Open market goods display has significant effect on the aesthetics of the surroundings



**Figure 14:** Relationship between open market goods display and the surroundings of  
Jos City Centre

Source: Graphing by Author, 2019.

The results in Figure 14 above shows that open market goods display has significant effect on the aesthetics of the surroundings. 75.76% of the respondents concurred to this while 24.24% of the respondents said open market goods display does not have significant effect on the surrounding because they are the beneficiaries of trading activities from open market goods display. This suggests going by the decision rule that the null hypothesis is rejected and upheld the alternative hypothesis. Conclusively, open market goods display significantly affects the aesthetics of the surroundings of Jos City Centre.

#### **4.12 Implications of open market goods display**

The nature of open market goods display on the surrounding landscape of Jos metropolis has economic, social and environmental implications. The study observed that informal trading activities in the city is responsible for environmental problems such as traffic congestion, accumulation of solid wastes on splitter island of the road, pollution, poor sanitary conditions. Splitter Island of the road meant for the planting of trees, hedges and shrubs now serves as spots for accumulation of solid wastes causing air pollution and unhygienic conditions for users and passers-by. Drainage channels are blocked leading to flooding during heavy rainfall; motorist's shoppers' park in areas that are not designated for parking; pedestrians have to walk right on the roads causing different types of accidents. Noise from the traders operating in an area that was not meant for them and exhaust pipe smoke from vehicle passing and congregating along narrow streets and noise is cause for a great concern.

As observed from this research, the social status, education, cultural identity and religion are affected negatively. The bulk of the surveyed population were teenagers and pre-adult population within the age range of 16 - 25years are vulnerable to many risks. Some of them trade during school hours thus being deprived of attending school at appropriate age. Still some go into armed robbery, rape, drug addicts, cultism and kidnapers and exposure to dangers. Some of them are used to bomb religious places of worship and business centres in town.

Markets play a vital role in the economic life of the people, and they are essential in the chain of commodity distribution (Adeyinka, et al., 2016). In the cities, markets are the unquestionable platforms for obtaining basic needs like food and clothing (Emmanuel, et al., 2014). This study observed that open market goods display has negative economic implications on both individual and government. Hanging commodities on walls of buildings, trees, fences and indiscriminate occupation of public space in defiance of formal planning and land use arrangements impedes free flow of pedestrian and motorized traffic leading to congested transportation networks, zoning problems and land use conflicts. Destruction of social amenities like drainages, telecommunication cables and structures incurs heavy cost by the government to repair, rehabilitate and maintain. Attempts involving everybody ranging from the young and the old, men and women, the educated and the illiterate, all irking to earn a living through the practice is no doubt unsafe, risky and dangerous.

#### **5.0 CONCLUSION**

The study observed that traders were mostly young and majorly male who are unmarried. Educational qualification was mainly secondary education or either a National Diploma/National Certificate in Education. The observed problems in the city include



environmental, social and economic concerns. Encroachment of the major roads by traders was found to lead to traffic congestion and accidents. Various preliminary surveys carried out on the roads, areas and land marks within the city centre (Ahmadu Bello Way/Murtala Muhammed Way/Rwang Pam Street, Jos) reveals unprecedented spread of market goods displayed openly in wheel barrows, carts while others hang their commodities on walls of buildings, trees, fences. It manifests in indiscriminate occupation of public space in defiance of formal planning and land use arrangements, an eye sore on aesthetic appearance of ambient buildings, surrounding landscape with little regard for intrinsic beauty and suitability, impediments to free flow of pedestrian and motorized traffic and congested transportation networks, zoning problems and land use conflicts.

Based on the findings of the study, it was concluded that open market goods display has negative effect on the aesthetics of the surroundings landscape of Jos Metropolis of Plateau State. Encroachment of road setback by traders causes traffic congestion, accidents, noise pollution, and untidy environment among others. It is also concluded that street traders in Jos metropolis lack organization and sense of duty to the government as many of them fail to remit levies to appropriate government agencies.

## 6.0 RECOMMENDATION

The study recommends that government should enact laws to govern the trading of goods openly on the roads and land mark areas within the city centre and monitor their activities. More trading spaces in form of shops and stalls should be provided to prevent on street trading and traffic congestion. Provision of social amenities such as electricity and water supply, to traders to maintain proper hygiene and serenity of the streets. Levies and fines should be placed on traders who dump refuse in and around the city. While government can also partner with the private sector. There is need for proper awareness to traders so as to ensure compliance to government policies and remitting of revenue to appropriate government agencies.

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