Analysis of market typology and functions in the development of Osun state, Nigeria

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Abstract

Market centres are socio-cultural, political and economic institutions created by man. They are of different types and have land use implications and functions. This study adopts three main methods for its data gathering, namely; inventory survey (to identify the existing market centres and their facilities), documentary analysis of literature and lastly the use of questionnaires directed at the sellers, shoppers and officers in-charge of the market centres. Findings reveal the existence of five related types of markets based on periods and durations of operation. The patronage of sellers and shoppers depends on the types of markets. Market administration was found to be undertaken by group of people called market associations, the local government councils and the community/kingship. Recommendation include: the establishment of more market centres in the state, provision of market facilities, construction and open-up of roads to facilitate easy distribution of goods and services to every part of the state.

Keywords: Market-typology; Facilities; Function; Development Administration; Nigeria

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1. Introduction

Market centre in spatial planning represents a geographical space for the distribution of commodities and services. This statement is equivocally supported by the works of Vagale (1972), Sada et al. (1978), Onyemelukwu (1974), Trager- Lilian (1979), Eben – Saleh (1999) among others. The different roles of market in the development of a nation and among nations are not something not to be ignored. While Meillassoux (1962) emphasizes that market acts as meeting place for the perpetuation of lineage rights and obligations, Belshaw (1965) echoes the political role of market and Bohanna (1962) sees market centres as central area for dissemination of information. Market centre as submitted by Sada et al, (op cit) and Iloeje (1976) are special man-made features in Nigeria settlements and that every town has at least one large daily market depending on the status of the town. According to them, Lagos has at least seven daily markets; Ibadan has ten, Kano two, Onitsha two and Aba two. Villages on the other hands have majorities of the periodic markets usually hold on every four or eight days. In some cases, according to them, town spirits (ghost) are still believed to meet and live in trees in and around the market places. Just as the Yoruba markets are associated with one ritual or the other, so the early Christian and Islamic missionaries recognized the value of the market as a place for the propagation of the gospel. For instance, market places are found to be useful for preaching of gospel messages. In the present day, many churches or mosques are located or established close to or adjacent to the market place (Olorunfemi, 1999). She cites the examples of Badagry in Nigeria where the first church was built between two public markets. Also in Akure, the central mosque is opposite the popular King’s market called Oja – Oba market (Omole, 2003). Similarly, in Ibo land in Nigeria, a person who had sworn an oath of innocence at a shrine and had survived a year without dying or becoming seriously ill, had the right to parade himself through the market to celebrate his freedom (Olorunfemi op cit). This paper therefore examines the types of market centres, their establishment and authorities responsible for their proper function vis-à-vis their development to the State.

The paper set out with introduction; follow with the research methods and descriptions of the study area. Others are the literature perspective, discussion of research findings, and ends with summary of finding and planning implications.

2. Research methods and description of the study area

This research is an extract from a wider research carried out in Osun State. The deductions are from the thirty local government areas of Osun State. Precisely, out of the 253 market centres identified in the state, sixty of them, representing 23.7% were surveyed with the aids of questionnaire administration responded to by 300 shoppers and 420 sellers; this was augmented with an inventory survey which identified the market centres in the study area. Data collected from the survey are subjected to univariate, bivariate and multivariate analysis by the use of Statistical Package for Social Scientist (SPSS).

Osun State came to being on August 27th 1991 in the sixth year anniversary broadcast of President Ibrahim Babagida. The state was one of the new state created in 1991, other being, Abia, Kebbi, Delta, Jigawa,
Enugu, Yobe and Taraba. Before this time, the state was part of the old Western Region and later became part of the old Oyo State before it finally becomes a state today. Most of the town and villages in Osun State of today are as old as the country itself. The state capital is Oshogbo and there are a total number of thirty local government councils. The major towns in the state, apart from the state capital are: Ilesha, Ile-Ife, Ede, Ejigbo and others. The state has a total land area of 9602 square kilometers and shares boundaries with Kwara State in the North, Oyo in the west, Ogun and Ondo in the south and Ondo and Ekiti in the East. The National Population Figure of 2006 put the state population as 3416,959. The State is blessed with abundant deposit of natural resource among which are: Gold, Limestone, Kaolin and Granite. The state experiences a tropical climate while the local natural vegetation is the lowland rainforest type which favours agriculture commodities found in different market centres in the state.

3. Literature perspective

Evidently, plethora detailed research works are available on the study of market in both developed and developing countries of the world. The work of scholars particular that of Nwafor (1982), Vagale (1972), Sada et al. (1978), Olorunfemi (1998), Eighmy (1972), Onyemelukwe (1974), Agiri Babatunde (1979), Olowu (2000) Trager-Lillian (1979), Eben – Saleh (1999) and Omole et al. (2012) among others have successfully identified two basic classes of market which can be explained distinctively or interrelated. These two classes of market according to their proponents are daily and the periodic market. The daily market can elaborately be divided into four depending on the time of day the market takes place These classifications include; (i) morning (ii) Day (iii) Night and lastly (iv) Day/ Night markets (Omole, 2012). The daily market according to Nwafor (1982) required the existence of many full time trades. Some scholars are of the view that daily markets are the most popular and convenient type of market in providing daily needs for the people on daily basis. Holder, et al 1969, Hill, 1966; Omole, 2003 and Iloeje, 1976 noted that this is so perhaps because of the importance and significance of the daily markets.

Studies have also shown that market perform social and cultural functions in the society. For instance, Meillassoux (1962) observed the social function of market by considering markets as not only occasion or place for the exchange of inter-regional goods, rather an exchange of movable adaptation of economics, to the nature of communication and to autonomous form of social exchange.

This role of market as observe by Meillassoux (1962) is true, especially in Yoruba land (particularly in this study area, Osun State) where the use of markets as meeting places for the perpetuation of lineage rights and obligations are in existence. Similarly, Odubgemi et al. (1987) saw the market place as a place which provides opportunity to meet one’s friends and kinsmen for the exchange of news and gossip. Omole, et al. (2012) argued that the political weights of political parties are tested in market places. Olorunfemi (1999) re-echoed the work of Omole (op cit) by saying that market places serve as avenue for political competition in search of political power, as this was apparent according to her among the Arewa people of Niger Republic where competition for political power for authority and legitimacy of a ruler is affirmed. The argument according to her is that market centres afford a physical regrouping of social entity that has formally dispersed.
In similar studies, Vagale (1972) and Omole (2003) amplify the fact that market places are one of the fundamental points of economic life and that traditional system in Nigeria represents an articulation of spatial linkages which has been neglected in the post-independence development, such as the building of transport routes to link settlements. They argued that despite the lack of recognition given to the development of market centres in the post-independence period, market centres still strive to perform integrative functions, by providing the link between the production and consumption centres of the economies within which they are located. They agree that not all the market centres are in urban centres, but yet, market centres act as centres for the diffusion of information to the surrounding areas and regions. Not only this, The Inquire (1998) and Omole et al. (2012) pointed out that, market centres due to their centrality and volume of human population are used for dissemination of information which could be announced in the market centres by the town criers. The belief is that once such information is announced in the market centres, it would be dissemination to every part of the town by the population in the market without pains. He want further to say that the spread of information about health matter, vaccination against small pox and other diseases are done most of the time in the market centres.

He however disagreed with the concept of ‘growth pole’ as conceived in the developed world; in that, the concept is not best suited the developing countries, because according to him, the growth pole idea superimposes a largely alien set of urban places on the indigenous socio-economic setting. He therefore held to the view that the system of market centres as an approach would better be suited for developmental purposes because of its articulation and intricate ties with the people. Apart from the diffusion of information by market centres, Anthonia (1973) asserted that market centres are social centres. According to him, a market place is a venue for courtship, visits, exchange of ideas and other social activities; for dancing, dating drumming, reuniting and other festivities. He argued that a market day is generally regarded as a social gathering day apart from the economic activities taking place in the market centers. He therefore advised that the social function of market place should be utilized via the provision of organized recreation facilities near market centres. According to him, this would be of tremendous advantage and overall cohesion for the development of the youth-physically and mentally and would probably be a good forum for the greater enlightenment of the populace at large. Along this line, Olorunfemi, 1999; Omole, 2004 has specifically mentioned that the most significant and interesting roles of market, apart from the economic function is that of serving as meeting place for the perpetuation of lineage rights and obligations. Similarly, religious roles have been ascribed to the market centres especially in Yoruba land. This role can be vividly looked at from; traditional, Islamic and Christian view points. Most markets according to Hodder et al. (1969) have for some times served as places for sacrifice or ritual. The purpose for this according to him is to maintain peace at the market and in the town in general. Segal (1977) in his study of city planning in ancient times noted that the holiness and sacredness of the town is in the market places. He claims that person who had been accused of criminal acts could not be allowed to enter into “Agora” which is an equivalent of market places in Greek cities and into ‘Forum’ in Roman cities. This according to him showed the holiness of the market centres. Other literature findings reveal that market centres are of different types, importance and functions. The above discussions therefore become imperative as they provide anchor to hang this study.
4. Discussion and analysis of research findings

The findings of this research are presented under four main sub-titles, namely; type of markets and their patronage, establishment of market, market associations and lastly the regression analysis of factors that influence and contribution to the patronage of markets centres in the study area.

4.1. Types of Markets (market topology)

Market centres in Osun State are found to be of different orders in terms of goods and services they provide, the period and mode of their operation, the land they occupy and their level of patronage among others. Very important here is the classification in term of their periodicity and mode of their operation and patronage.

Considering the period, mode of operation, and patronage of markets in Osun State, two major types of market can be identified. These are periodic markets, and daily markets. The night market (or evening markets) and early morning markets are other variance that exist alongside the major types of markets. It is also discovered in most cases that the same site or location that is used for the periodic markets is also used for the daily market while in other cases; there are other locations for the periodic markets. Table 1 shows the responses of the market operators about the types of markets they operate in. The table shows five different types of markets centres in Osun State based on the time and period of operation. From the two set of responses (from sellers and shoppers) it was discovered that 101 (14%) indicated patronizing early morning markets most of which are rural markets or locations for selling and distribution of agricultural products. It was found that 54.2% patronized the periodic markets while the remaining 2.2% patronize both the daily and periodic markets.

Those patronizing the night markets among the sellers amounted to 19 (4.5%) while it was 19(6.3%) among the shoppers. Aggregately, a total of 38(5.3%) patronized night markets. Table 2 shows that majority 237(78%) of the respondents prefers patronizing night markets because they do not want to be seen in the market during the day, 45(15%) of the respondents believe that goods are cheaper in the night markets than other types of markets and for this reason, they prefer the night markets. Only 18(6%) respondents signified that they patronize night markets because it is more convenient, in that, it does not conflict with their work schedules.

The inventory survey shows that nearly all the night markets are located in the centre of the town. These types of market centres cannot be referred to as been deliberately designed and planned market centres. The structures in these market centres were made of temporary sheds while in some cases, part of the adjoining old buildings were used as market facilities for shops and warehouses. They predominantly operate between the hours of 4pm and 8 pm daily. Further investigations, particularly on the inventory survey show two broad categories of market centres, based on time or period of their operations. This is presented in Table 3 below. The information from Table 3 shows that there were more periodic markets in the state than the daily markets , that is,182(72%) against 71(28%). By location, majority of the periodic markets were located in the rural areas of the state or areas with less than 20,000 populations, while the daily markets were found in
the towns and local government headquarters. This confirms the finding of Odugbemi, et al (1987) that rural market is a function of rural settlements.

Investigation also shows that a lot of factors were responsible for the location of the majority of the periodic market in rural area. For instance, it was found that majority of those selling in these rural periodic markets were those who have a hand in the production and processing of some of the goods they were selling. These people stay in the same locality and thirdly, the availability and the development of transportation system in these areas confine rural dwellers mainly to the establishment of these types of markets. For these reasons, market days are spaced in time, not only to allow for a sufficient build-up of effective supply of products, but also to facilitate the combination and sales in a more efficient manner by the producers/sellers. Periodic markets therefore act primarily as injector of locally produced food stuffs and craft in to the distributive trade from the surplus areas.

4.2. Establishment of markets

Other features that were discovered in this study were ‘markets ownership’, location and administration. Constitutionally, market location and administration are under the Local Government List of Responsibilities and functions (Schedule 4 of the 1979 Constitution, FGN). This law gives the local governments the: “exclusive right to establish, maintain and regulate markets.......” By implication.

Revenue accruing from the trading or levy in the markets form part of the municipal funds. This forms part of the constitutional provision and legal backing for the local government to establish, locate and maintain the markets in the state. Based on this, the finding of the survey shows the establishment of the markets/ownerships of markets in the state is as presented below in Table 4 below.

Analysis from Table 4 reveals that 85% of the market ownership/authorities in-charge of market establishment were under the local government councils in the state. This conforms to the provision of the law as stated above. However, there were cases of ownership by some community and kingship councils in the state. This accounts for just 3.3%. The argument in support of these types of ownership is that by the virtue of the Yoruba tradition, markets in the western parts of Nigeria were owned by powerful rulers/ kings in the community and that has been in place before the introduction of the modern local government administration in Nigeria. With the modern local government administration in place, some of these markets owned by these traditionally power rulers and kings are now being taken over by the local councils.

In the study area, it was discovered that even though the local government council could be performing the functions of maintenance, provision of facilities and so on in the market centres. Yet most of the market centres still maintain their traditional names like; Oja Oba, Obada and other connotations that show their original founders.

4.3. Market Associations

There are many market associations in the state markets as there are many items sold in the markets. In other words, nearly every group of commodity sellers has its own association in each of the market areas. For
example, there are; rice sellers association, yam sellers association, pepper sellers association, cloth sellers association, among others. Interestingly, all these associations come under a mother body called "Osun State Market Woman Association" with their motto -face your business. This association has thirteen (13) executive members led by their state president, Alhaja Chief Mrs. A.O Asindemade. The association sees to the welfare of its member and activities in the market centres and in most cases represents them and presents their views to the state government on market matters. They also control the excesses of their members and sanction them when the need arises. In addition, a total of 7,056 cooperative societies of all types exist in the study area. These societies include; cooperative investment credit produce marketing, farmers' multipurpose, women' cooperative among others (The Inquire, 1998). It was also discovered that the establishment of market centres in the state is hanged on three key bodies, namely; the local government councils acting as the controllers and administrators, the people in the towns - mainly represented by the organized associations like the different trade unions in the market centres, particularly the Osun State Market Women Associations among other and lastly but very important, the approval of the kings in the towns where market centres are to be established. It was reliably gathered that the establishment, and importantly, the state government played advisory roles and recently built her own market centres and renovated some of some market centres in the state dated back to over 250 years ago, that is, 1752, even before the advent of modern Town Planning Authority and the creation of the State and its local government councils.

4.4. Regression analysis of factors that influence shopper’s patronage

The dependent variable (y)(shoppers' patronage) is regressed against the independent variables X₁ to X₉. The X₁ to X₉ are independent variables spelled out below;

\[
\begin{align*}
X_1 &= \text{Income} \\
X_2 &= \text{at average amount spent in the market at once. (AVG SPENT)} \\
X_3 &= \text{major items bought. (CDYPSMRK)} \\
X_4 &= \text{travel time - how long does it take you from your residence (TRVTIME)} \\
X_5 &= \text{available routes linking this market. (MRKLINKS)} \\
X_6 &= \text{mode of transport to the market. (MDTRAS)} \\
X_7 &= \text{type of market (MRKTYPE)} \\
X_8 &= \text{environmental assessment of the market in term of neatness. (HAS SMRK)} \\
X_9 &= \text{facilities available in/around the market. (MRKFACLY)} \\
Y &= \text{patronage (LETPATG)(dependent variable)}
\end{align*}
\]

From the empirical result presented in the model summary, in the Appendix A, the coefficient of multiple
determinations \(R^2 = 0.713\), which represents the proportion of the variance of the dependent variable that is
due to the combined effects of the independent variable. When \(R^2 = 0.713\), is multiplied by 100, we get 71.3% representing
the percentage of the variance of the dependent variable that is due to the combined effects of the independent variables. From this particular analysis, 71.3% of the variations or a change in Y, that is, the
dependent variable (patronage) is explained by the independent variable X₁ to X₉. The F-statistic or F-ratio is 4.627. This is statistically significant at α 0.05. Similarly, the T-ratio as presented in Table 5 reveals that only variables X₄ and X₇, that is, "travel time" and "types of market" respectively, are the only significant determinants of patronage; while other variables; X₁, X₂, X₃, X₅, X₆, X₈ and X₉ are not significant, and as such, can be statistically ignored. Using only the significant variables X₄ (travel time) and X₇ (type of market) to compute the multiple regression model gives the result below:

\[ Y = a + b₄X₄ + b₇X₇ \]  \hspace{1cm} (1)

Of the two significant variables, X₄ (travel time) and X₇ (Type of market) (as shown in Table 5 and illustrated in Equation 1) contributed positively to patronage (Y) by 26.2%. This finding is true of the periodic market, in that they draw market patrons from both within and far away locations to the market centres. On the other hand, variable X₄ (Travel Time) has a small negative contribution to patronage (Y). Based on this, a prediction about the patronage can be made based on this finding. For instance, if the numbers of periodic market is 182 and the average Travel Time is 1 hour, the patronage can be predicted, thus using the regression equation.

\[
\text{Patronage} = 2.867 + (-0.111) + 0.263(182) = 2.867 - .111 + 47.87
\]

\[
\text{Patronage} = 50.622.
\]

What this reveals is that the higher the number of periodic market, the less the travel time will be, in that people might now switch over to a periodic market located closer to them, if there are options for them to do so. The increase in number of the periodic market will serve as intervening opportunity thereby reducing distance to be traveled.

5. Summary of finding and policy implications

This study has shown that the need of all and sundry particularly as it affects the provision of market shops/stalls/stores cannot be met for financial reasons. As long as this condition persists, there will continue to be market squatters and hawkers in the market centres. To ameliorate this situation, it is recommended that government, particularly Local Government Council (LGC) should carry out a detailed market survey to determine the shop-needs requirements, on regular basis, so that, they can provide more shops/stalls/stores and allocate them on the basis of needs.

It is evident from this study that the LGCs collect substantial amounts of money as revenue from the market stores/shops and other charges in form of rents. It is therefore recommended that some percentage of this money be invested in to the physical development of the market centres in the state. This will not only make the market centres aesthetic but it will enhance the patronage and brings a trickle down developmental effects to the rural populace and the generality of the people in the state.
It was also discovered that there are still glaring inadequate numbers of market centres in some local government areas (LGAs) even with their large population. Also, there are some markets centres in some LGAs that are under-utilized. The location of misused and underutilized market centres underscores the need for proper market planning to be supervised by the planning authorities in the state. The LGAs that are inadequately served with market centres will require more market centres to be provided, while those LGAs that are currently well served, would only need to concern themselves with the environmental facilities of their market areas. The over-all objective would be to reduce to the barest minimum, the distance to which market patrons (sellers/shoppers) walk or travel to their choices of market centres. In balancing the distribution of market centres in the state, it is necessary that the issue of population size, resources available in each area, issue of linkage / accessibility and political consideration have to be looked into seriously by the LGs, the state government and particularly by the Local Planning Authorities. The planning authorities should be encouraged to work together for the sitting and locating of the market centres in the state for good security, safety and functionality of the market centres.

The choice of a suitable location as well as the layout of market units - (shops/stalls/stores) furnished with adequate infrastructural facilities should constantly be the target of the planning process. Lack of proper execution zeal which has plagued and destroyed many developmental efforts in the LGAs in the state must be guarded against.

The ‘Urban market centres’ in towns like Ife central, Boripe, Ilesha, Ejigbo, Iwo, Irewole, Ikire, Oshogbo, and Ifetedo should be expanded and provided with infrastructural factices The ideals behind this, is that these big existing market centres will make every part of the state closer to a big market centres; where ‘high order goods’ can be gotten without much stress. These centres should be accorded significance as spring board (or market growth centres) for the speedy development of the state.

Likewise, the government must recognize the rural areas of the state in terms of what their resources are and what they contribute to the state through their market centres. Such resources should be developed based on comparative advantages. As a matter of importance, the state government should prepare a master plan for these areas and a regional plan for the state with all the LGAs connected by arterial road system for the free flow of agricultural, industrial and manufactured goods in the state. It is also of great importance for the state government to persuade the federal government to take over the construction of some roads in the state particularly those that can link the state with other states in the country (This recommendation become imperative since the state is a landlocked state, that is, have no access to the sea or international boundary). Among the roads, this study is recommending for opening up are Ife -Igbira -Yekemi -Apoje road linking Ijebu-Igbo in Ogun State. The rehabilitation of Ijebu-jesha -Esa -Odo -Ijare -Otan - Ile -Igbajo -Iresi ,Otan-Ayegbaju -Ilaorangun linking Kwara State among others.

On area of assistance to the market traders, the state government in conjunction with the LGs should fashion out avenues through the State Ministry of Trade and Commerce to offer soft loans to the market sellers through its registered associations. This measure will help to create employment opportunities particularly among the women folk who are in the majority in the state market centres and this will also reduce idleness among the female gender in the state. Similarly, the cooperative societies should be
encouraged among the market associations, probably under the guidance of the Ministry of Women Affairs. The market associations in the state could also organize an enlightenment workshop where by women can be trained to be self employed and join cooperative societies.

It is also of importance that the LGCs and particularly the State Ministry of Agriculture and Natural Resources and Ministry of Trade and Commerce should provide a data bank where information concerning agricultural products available in the markets centres in the state are kept. Information should be managed on where such produces come from, their consumers and possible market outlets, among others. These types of information will assist researchers, governments, investors and the general public.

Having said this, it is necessary to add some cautionary notes on the implementation of market development proposal, not to be seen to replace the overall developmental programmes of the state; rather, it should be seen as an integral part of the state developmental programmes.

**Table 1.** Typology: Type of markets operating in the study area

<table>
<thead>
<tr>
<th>Types of market</th>
<th>Sellers Frequency</th>
<th>Percentage</th>
<th>Shoppers Frequency</th>
<th>Percentage</th>
<th>Total Frequency</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early morning market</td>
<td>99</td>
<td>23.6</td>
<td>2</td>
<td>0.7</td>
<td>101</td>
<td>14</td>
</tr>
<tr>
<td>Night markets</td>
<td>19</td>
<td>4.5</td>
<td>19</td>
<td>6.3</td>
<td>38</td>
<td>5.3</td>
</tr>
<tr>
<td>Full daily markets</td>
<td>276</td>
<td>65.7</td>
<td>114</td>
<td>38</td>
<td>390</td>
<td>54.2</td>
</tr>
<tr>
<td>Periodic markets</td>
<td>10</td>
<td>2.4</td>
<td>165</td>
<td>55</td>
<td>175</td>
<td>24.3</td>
</tr>
<tr>
<td>Both daily and periodic</td>
<td>16</td>
<td>3.8</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>420</td>
<td>100%</td>
<td>300</td>
<td>100%</td>
<td>720</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: Authors field work (2013)*
Table 2. Reasons (s) for patronizing night markets

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is convenient and does not conflict with work time</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Goods at night markets are cheaper</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>To avoid being seen in the day market</td>
<td>237</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Author’s field work (2013)

Table 3. Major type of markets and market-cycle days in Osun State

<table>
<thead>
<tr>
<th>Major types of market</th>
<th>Market Days</th>
<th>Frequency</th>
<th>Percentage of type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Periodic</td>
<td>17</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>15</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>14</td>
<td>2</td>
<td>72</td>
</tr>
<tr>
<td>✓</td>
<td>8</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>5</td>
<td>155</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>Daily</td>
<td>71</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>253</td>
<td>100%</td>
</tr>
</tbody>
</table>

(1) Sources: Authors’ field work, Inventory Survey (2012)
(2) Osun State Market Women Association Survey (2013)
Table 4. Authority in-charge of markets

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government</td>
<td>51</td>
<td>85</td>
</tr>
<tr>
<td>Community and kingship</td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100%</td>
</tr>
</tbody>
</table>

Authors field work (2013)

Table 5. Analysis of factors that influence market patronage

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T- Ratio</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.867</td>
<td>.256</td>
<td>11.190</td>
<td>S</td>
</tr>
<tr>
<td>Xi</td>
<td>.015</td>
<td>.032</td>
<td>-.478</td>
<td>NS</td>
</tr>
<tr>
<td>X2</td>
<td>-.076</td>
<td>.045</td>
<td>-1.690</td>
<td>NS</td>
</tr>
<tr>
<td>X3</td>
<td>.041</td>
<td>.024</td>
<td>-1.712</td>
<td>NS</td>
</tr>
<tr>
<td>X4</td>
<td>-.111</td>
<td>.050</td>
<td>-2.230</td>
<td>S</td>
</tr>
<tr>
<td>X5</td>
<td>.0082</td>
<td>.030</td>
<td>-.272</td>
<td>NS</td>
</tr>
<tr>
<td>X6</td>
<td>.022</td>
<td>.032</td>
<td>.693</td>
<td>NS</td>
</tr>
<tr>
<td>X7</td>
<td>.262</td>
<td>.056</td>
<td>-4.662</td>
<td>S</td>
</tr>
<tr>
<td>X8</td>
<td>.112</td>
<td>.066</td>
<td>-1.698</td>
<td>NS</td>
</tr>
<tr>
<td>X9</td>
<td>.0039</td>
<td>.009</td>
<td>-.310</td>
<td>NS</td>
</tr>
</tbody>
</table>

S= significant  
NS= not significant  
α= Significant level 0.05  
R²= 0.713  
F= 4.627

Authors field work (2013)
References


Federal Republic of Nigeria, FGN (1991), National Population Figure (Provisional Result), Nigeria.


### APPENDIX A

Regression Analysis of the Factors that Influence Shoppers Patronage

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Sid. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities available in /around the market; Income; Type of market;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your mode of transport to the market; Environmental assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the market in term of neatness; How many available routes link to this</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>market;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At average, give the amount you spend in the market at once; Travel time</td>
<td>.737</td>
<td>713</td>
<td>710</td>
<td>58</td>
</tr>
<tr>
<td>does it take you from your residence, Major items bought from the market</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Dependent Variable: How often do you patronize this market?  
b. Method: Enter*
c. Independent variables: (constant), facilities available in / around the market, income, type of market, what is your mode of transport to the market, what is your environment assessment of the market in term of neatness, how many available routes link this market, at average, give the amount you spend in the market at once, travel time: how long does it take you from your residence, major items bought.
d. All requested variables entered.

**APPENDIX B**

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>13.953</td>
<td>9</td>
<td>1.550</td>
<td>4.62</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>97.177</td>
<td>290</td>
<td>.335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>111.130</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: How often do you patronize this market?
b. Method: Enter
c. Independent variables: (constant), facilities available in/around the market, income, type of market, what is your mode of transport to the market, what is your environment assessment of the market in term of neatness, how many available routes link this market, at average, give the amount you spend in the market at once, travel time: how long does it take you from your residence, major items bought.