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TRAVEL BEHAVIOUR OF WOMEN TO MARKETS IN RURAL COMMUNITIES IN AYEDAADE LOCAL GOVERNMENT AREA OF OSUN STATE

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Abstract

This study examined the accessibility of women to markets in some rural communities in Ayedaade Local Government Area of Osun State. Both primary and secondary data were utilised for this research. Three sets of data were required. The first set of data focused on the socio-economic characteristics of rural dwellers with emphasis on gender composition, level of education and possession of personal means of transportation. The second data required focused on the travel pattern of rural population to markets taking into account attributes such as distance travelled, mode of transportation mostly used, average travel time and frequency of trip to market in a week. The last category of data elicited was based on constraint of women to access market centres in the region. Descriptive and inferential statistics were employed to analyse the data. Findings reveal that agricultural products and few manufactured goods are traded at Olufi central market in the study area. More than 60% of women relied on public transport services to convey their goods to markets. 30% of women in the rural communities trekked to markets and travelled several kilometres to engage in commercial activities. There is gender variation on transport mode to markets in the rural region of Ayedaade Local Government. Many of the rural population claimed that their agricultural produce decayed on transit because of infrequent operation of the transport services in the region. The study therefore recommends that there is need to provide community based transport services at subsidized rate for rural communities in Nigeria so as to enhance the accessibility of women to markets and participate in other productive activities in the rural areas of Nigeria.

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INTRODUCTION

Women generally have less access to transport services so as to engage in different trip purposes such as work, shopping, recreation and visit to relatives when occasions demand. The situation is much complex in some rural communities in Nigeria where millions of women reside to earn their livelihood. Many rural dwellers in Nigeria do not have their own personal means of transportation, they rely more on public transport services which are not easily accessible (Dawson and Barwell 1993; Ellis 1996 as cited in Starkey et al. 2002, 10). On a general note, men tend to monopolise transport services available to members of their families at the expense of the women (Pucher 2009, 5 as cited in Peters 2013, 5). Since time immemorial, no community has been self-sustaining, they rely on others for the goods they cannot produce, hence, there is need for exchange of goods and this is better done at the market centre where buying and selling takes place. Women are at the centre of such transactions in Nigeria. It is pertinent to note that majority of women in rural communities in Nigeria convey by head agricultural produce to markets for sale, trekking several kilometres (Adetunji 2003, 1). In an assessment of the accessibility of women to market in Pune, India, Astrop et al. (1996, 29), reported that distance to the trading point and convenience are the main reasons for trading in the particular market in the study area. They reported that many respondents tend to trade within local areas and commute short distance to market. More than 50% of market women in Pune, India indicated that they travelled by foot. The frequency of their trip to market is a function of the nature of rural road network, demand and distance travelled (Ellis 1997; Adetunji 2003, 44). In some of the rural communities in Sub-Saharan countries, many traders travel to periodic market in order to buy or sell goods. Market is seen as central or meeting place where traders from rural or urban centres meet to engage in their business transactions. Despite the role of rural market in facilitating social, cultural and economic development of their environment, it is pertinent to note that high transport fare charge by vehicle owners, long distance travel, unreliable transport services and poor rural network are some of the major challenges to access rural markets in Nigeria. It is on this background that this study was designed to examine the accessibility of women to markets in some rural communities in Ayedaade Local Government Area of Osun State so as to advise the government on how to alleviate transport challenges of women in the region and other agrarian communities in Nigeria in general.

THEORETICAL POINT OF DEPARTURE

Theoretically, a market serves as a central place to the surrounding rural settlements. It provides essential goods and services to the neighbouring towns and villages (Dey, Pathak, and Baghmar 2017, 45). In this context, manufactured goods produced in the towns are brought to the rural markets for sale. Similarly, agricultural produce in villages such as yams, banana, tomatoes, pepper to mention but few are traded at the local market. The exchange of goods at the market helps to promote social interaction in the environment and promote cultural and economic development of the region. This help to alleviate the poverty of rural dwellers because it gives opportunity to the farmers to get market for their farm produce and reduce wastage that might result from rotten food items on their farm sites (Dey, Pathak, and Baghmar 2017, 45). Despite the significant role of market for economic, social and regional development, it is worrisome to observe that many rural dwellers particularly women and their children in Nigeria are less accessible to market due to poor rural road networks and unreliable transport services. The situation is more complex in

Ayedaade Local Government Area of Osun State, where some of these roads are in deplorable conditions. Motorised transport services particularly Pick Up Vans which were easily accessible for rural mobility in the early 1990s are no long available except in few rural communities connected to all weather roads. It is on this background that this study aims to examine travel behaviour of women to market in Ayedaade Local Government Area of Osun State with a view to promoting the accessibility of traders to market and encourage farmers to produce more of agricultural goods for marketing in the region.

THE STUDY AREA

Ayedaade Local Government Area of Osun State is the study area (Figure 1). Virtually all settlements in Ayedaade Local Government of Osun State are rural communities except Gbongan, Odeomu and Orile-Owu. The study area lies within the tropical rainforest, where agriculture is the main occupation of the inhabitants due to the favourable climatic condition of the region.

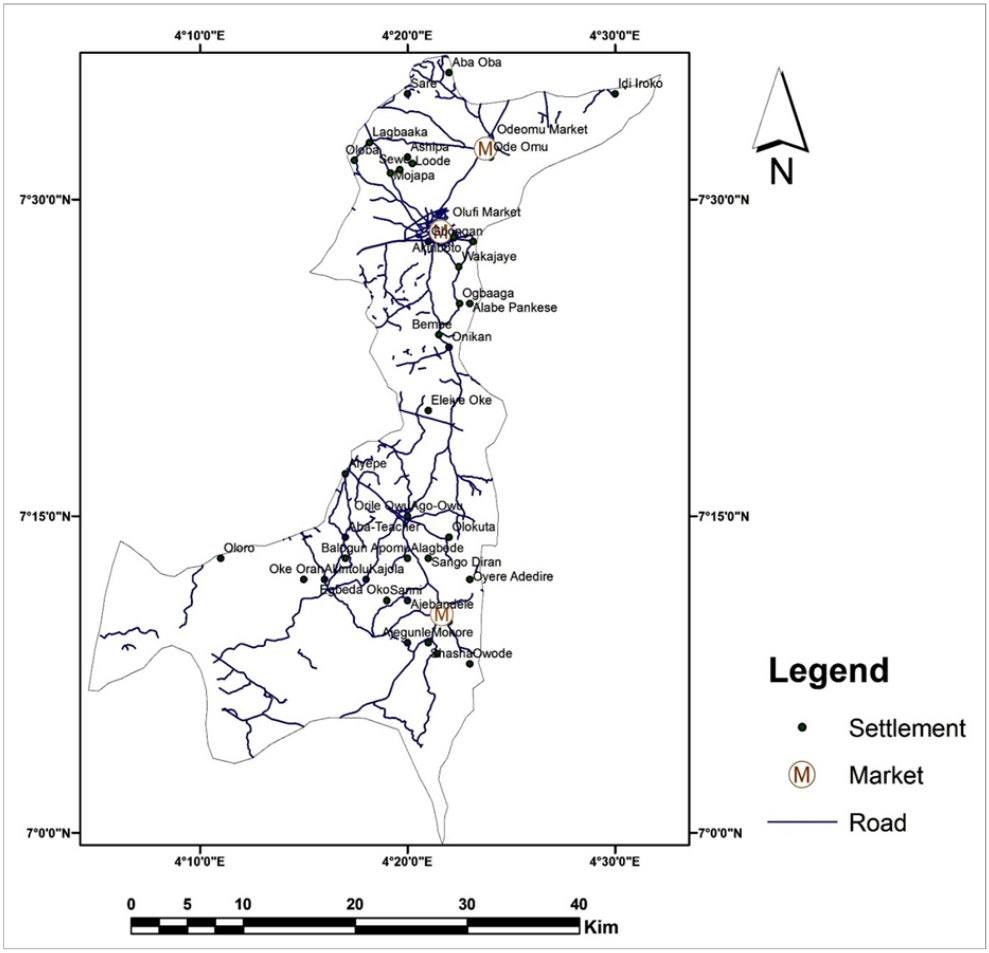

Figure 1. Selected Rural Settlements and Major Functioning Markets in Ayedaade Local Government Area of Osun State.

Farmers in this local government cultivate food crops for domestic consumption and excess produce for sale at the local markets. The food crops cultivated in the council area include yam, maize, banana, plantain, cassava and many other local food crops. Cocoa is the principal export crop produced in the rural regions of the study area. Large production of agricultural crops has promoted the image of Ayedaade Local Government area in the south-western Nigeria as one the trading centres for agricultural products. Before independence, many periodic

markets sprang up in some of the rural communities in Ayedaade Local Government Area to facilitate the marketing of their agricultural products. Some of these notable markets are Olufi market which is located at Gbongan, the head Quarters of Ayedaade Local Government. Other prominent markets in the region include Obada located at Odeomu town, Akiriboto, Araromi Owu and Wakajaiye (Figure 1). Apart from agricultural products produced in the region, manufactured goods of various types are brought from many states of the federation for trading purposes. It is on this background that this study aims to examine the pattern of trading activities in the region with the specific objective of examining the constraint of women to achieve a sustainable business activity or trading activity in the region.

MATERIALS AND METHODOLOGY

Materials

Primary and secondary data were utilised for this research. Primary data comprises of three categories. The first set of data focussed on the socio-economic characteristics of rural dwellers with emphasis on gender composition, level of education, occupation and possession of personal means of transportation. The second data required focus on the travel pattern of rural population to markets taking into account attributes such as distance travelled, mode of transportation mostly used, average travel time and frequency of trips to the market in a week. The last category of data solicited was based on constraint of women to access market centres in the region particularly on their issues of accessing personal mean of transportation, movement of their goods on poor rural roads that were largely untarred.

The secondary data utilised include an administrative map of Ayedaade Local Government Area made available by Ayedaade Local Government Council Area of Osun State. Other data were the coordinates of (i) selected rural settlements that have a population of less than 500 in the Council Area, (ii) main Existing markets patronised by rural households in the study area, using a hand held Geographical Position System (GPS). These coordinates were subsequently plotted to produce point maps using the UTM, Zone 31, Minna datum coordinate system. The point maps produced were overlaid on the scanned administrative map which was used to produce map showing the locations of main market patronised by rural households in the study area. The average distance of the nearest main market to each of the sampled rural settlements in Ayedaade Local Government Area was measured using the 'Ruler' menu of ArcGIS 10.3.1. Furthermore average nearest neighbourhood analysis was performed for the point data using the Spatial Statistics toolbox of ArcGIS 10.3.1 software.

Method

Thirteen rural settlements with population of less than 5,000 were purposefully selected for questionnaire administration. An average of 20 traders was selected in each of the sampled settlement. A systematic random sampling procedure was adopted in the administration of these questionnaires in the selected villages to the trader in respect of their gender classification. A systematic random sampling procedure was based on the principle that once the initial trader of 1 in every 3 building was selected, others subsequently follow in a sequential or regular pattern until 20 copies of questionnaire was completed in each of the sampled settlement. On the whole, 260 copies of questionnaires were administered, out of which 202 were analysable.

Statistical Analysis

Both descriptive and inferential statistics were employed to analyse the data. Descriptive statistics utilised include tables of percentage to analyse the travel patterns of rural traders to markets. Analysis of Variance was used to examine the variation in mode choice of transportation among sampled rural household to markets. Average Nearest Neighbourhood Analysis was used to examine the average distance of the nearest Main market to each of the sampled rural settlements in the studies area. Factors Analysis was employed to determine most significant factors affecting the markets patronised by traders in agrarian communities of Ayedaade Local Government Area of Osun State.

RESULTS AND DISCUSSION

Many rural road networks in Nigeria are in deplorable conditions. Some rural communities are less accessible to some basic facilities located outside their village. Ayedaade Local Government Area of Osun State is not exempted from this menace. Table 1 reveals that 60.0% of rural communities sampled in the council area are connected with earth surface rural road that was largely untarred. These communities are Bembe, Lagbaka, Mojapa, Oloba and Oluwada. Apart from the fact that these villages are one lane, some are not motorable during the rainy season. Traders in these communities have access to only commercial motorcycles to transport their goods on the market day. Further analysis reveals that the maintenance culture of rural road networks in the study area require much to desire. Table 1 shows that 13.8% of the traders in rural communities sampled in the council area indicated that the road network connecting their village have never been rehabilitated or maintained over the past twenty years. 86.1% of rural households in the study area indicated that road

Table 1. Rural Roads Characteristics in Ayedaade Local Government Area of Osun State (Author's Field Survey 2019)

Name of Settlement or village	Nature of road networks connecting Sampled villages to the Market Patronised		Total	How often is the road maintained		Total
	Tarred road	Untarred road		Never	Periodically	
AKIRIBOT	0	15	**15**	0	15	**15**
ALABE PA	0	15	**15**	0	15	**15**
BENBE	14	0	**14**	0	14	**14**
LAGBAKA	16	0	**16**	0	16	**16**
LOODE	0	16	**16**	6	10	**16**
MOJAPA	17	0	**17**	6	11	**17**
MOKORE	0	15	**15**	0	15	**15**
OGBAAGA	0	15	**15**	0	15	**15**
OLOBA	16	0	**16**	16	0	**16**
OLUWADA	17	0	**17**	0	17	**17**
SARE	0	15	**15**	0	15	**15**
SEWE	0	16	**16**	0	16	**16**
WAKAJAYE	0	15	**15**	0	15	**15**
Total	**80 (39.6%)**	**122 (60.4%)**	**202**	**28 (13.9%)**	**174 (86.1%)**	**202**

networks connecting their villages experienced rehabilitation within the last five years. This contrary to what exists in Asian country where (Donnges, Edmonds, and Johannessen 2007) have reported that routine maintenance of rural road networks is highly essential to enhance accessibility of people to markets and other activity centres located in the neighbouring communities.

Finding reveals that there are eight periodic markets in Ayedaade Local Government area of Osun state. Some of these markets are Olufi, Oloba, Lagbaka, Onimu, Akiriboto 1, Akiriboto 11, Odeomu popularly called Obada market and Araromi Owu market. Due to rural urban migration in the early 80s, only three markets are functioning at the study area. These markets are Olufi main market, Obada market and Araromi market. In terms of the market patronage by traders either within or outside the local government area, Olufi is ranked highest. Table 2 revealed that 89.6% of the traders patronised Olufi market to transact their business. 7.4 % of traders indicated that they travelled to Araromi market. Only 3.0% travelled to Odeyinka market which is located at the neighbouring local government of the state. The result of this analysis is tangential or similar to the study of the urban travel behaviour and constraints of low income households and females in Pune, India, where Astrop et al. (1996, 29) reported that distance to the point of trading and convenience are major factors

Variables		Frequency	Percentage
Name of the Market Patronised			
	Araromi- Orile-Owu	15	7.4
	Odeyinka(Ireeole LGA)	6	3.0
	Olufi –Gbonga	181	89.6
Total		**202**	**100.0**
Goods Traded in the Market			
	Agricultural Products	178	88.0
	Textile Products	5	2.5
	Agricultural Implement	3	1.4
	Building Materials	6	3.0
	Provision	10	5.5
Total		**202**	**100.0**
Sources of Goods Traded in the Market			
	Produced within the LGA	136	67.3
	Produced outside the LGA	36	32.7
Total		**202**	**100.0**
Household Member Responsible for the Movement of Agricultural Products to the Market			
	Father (Men)	9	7.0
	Mother (Women)	97	75.8
	Male Children	9	7.0
	Female Children	13	10.2
Total		**128**	**100.0**

Table 2. Characteristics of Periodic Market Patronised by Traders in the Study Area (Data Source: Author's Field Survey 2019)

considered by traders in their choice of market for transaction of their business. Different varieties of goods are traded in the market in the council area. Table 2 revealed that agricultural products accounted for 88.0% of goods traded in the markets. Some of these agricultural products are banana, yam, pepper, onion, poultry products and beans. Beverages such as bournvita, toiletries and cosmetics are ranked second (5.0%) among the products traded in the markets in the study area. Building materials, textile products and agricultural implements such as cutlass and chemicals constituted 3.0%, 2.5% and 1.4% respectively. A substantial proportion of goods traded in the market in the study area come principally from within the Local Government Area. Table 2 revealed that 67.3% of the products traded in the markets comes from rural communities in Ayedaade Local Government. The remaining 32.7% of the goods traded in the market come from other parts of the country. In many rural communities in Nigeria, women are generally responsible for the movement of agricultural products to the market. Table 1 revealed that 75.8% of women in Ayedaade Local Government area of Osun state convey agricultural products to the market. Another 10.2% of their female children assist their parents to transport their farm produce to the market for sale. Only 7.0% each of men and their male children were involved in the movement of farm products to the market.

Market Patronised by Traders in the Study Area

Several reasons were given by traders/market women for patronising a particular market in the study area; some of these reasons specified include short distances from their villages to the market, centrality and easy access to sell their products, as well as demand for their products. Above all, distance to the market and accessibility was ranked highest by majority of the traders. The mean distance travel from the sampled settlements to Olufi market is 8.85 km. This ranged from 1.3 km in Akiriboto to 9.8 km in Oloba village. Traders living at Bembe, Oloba, Mojapa, Sewe and Mokore are less accessible to Olufi market because they travelled more than 6 km on rural road to engage in their business transactions during the market day. Obada market located in Odeomu town is the next periodic market patronized by traders in the study area after Olufi market. The mean distance travelled to access this market by the residents of these villages is 13.5 km. Table 3 reveals that villagers from Mokore, Wakajaye, Bembe,

Settlement Name	Olufi Market	Odeomu (Obada) Market	Araromi-Owu Market
Mojapa	**6.7**	**8.7**	**38.7**
Sewe	**6.5**	**7.8**	**38.9**
Loode	6.4	6.7	39,4
Lagbaaka	10	10.3	41.7
Oloba	9.8	11.7	40.4
Akiriboto	1.3	8.3	32.9
Alabe Pankese	6.5	13.7	27.2
Ogbaagba	6.5	8.1	27.1
Wakajaye	3.5	10.6	30.4
Bembe	9.5	16.8	24.4
Mokore	36.9	44.2	3.5
Average Distance	8.85	13.5	31.4

Table 3. Mean Distance Travelled to Market (Data Source: Author's Computation 2019)

Oloba and Lagbaka travelled more than 10 km to access Obada market at Odeomu. Long distance travel to market by traders in many villages sampled to engage in business transaction implies that traders in the study area are less accessible to market. This is because the commuting distance to markets is more than 10 km radius recommended for maximum distance travelled to access rural market (Tracey-White 1995). Araromi Owu market in Ayedaade Local Government Area and Odeyinka market located at Irewole Local Government are the least periodic markets patronized by traders from the study area. These two markets are located farther away from some of the rural communities in Gbongan and Odeomu, which constitutes two out of three major regions where the council area are divided to. Only traders in Mokore village are more accessible to Ararom market and they travel at an average of 3.5 km to the market. Other sampled settlements travel more than 20 km to transact their businesses at Araromi Owu market. However, some other settlements located close to Orile Owu town are more likely to travel short distances to access this market.

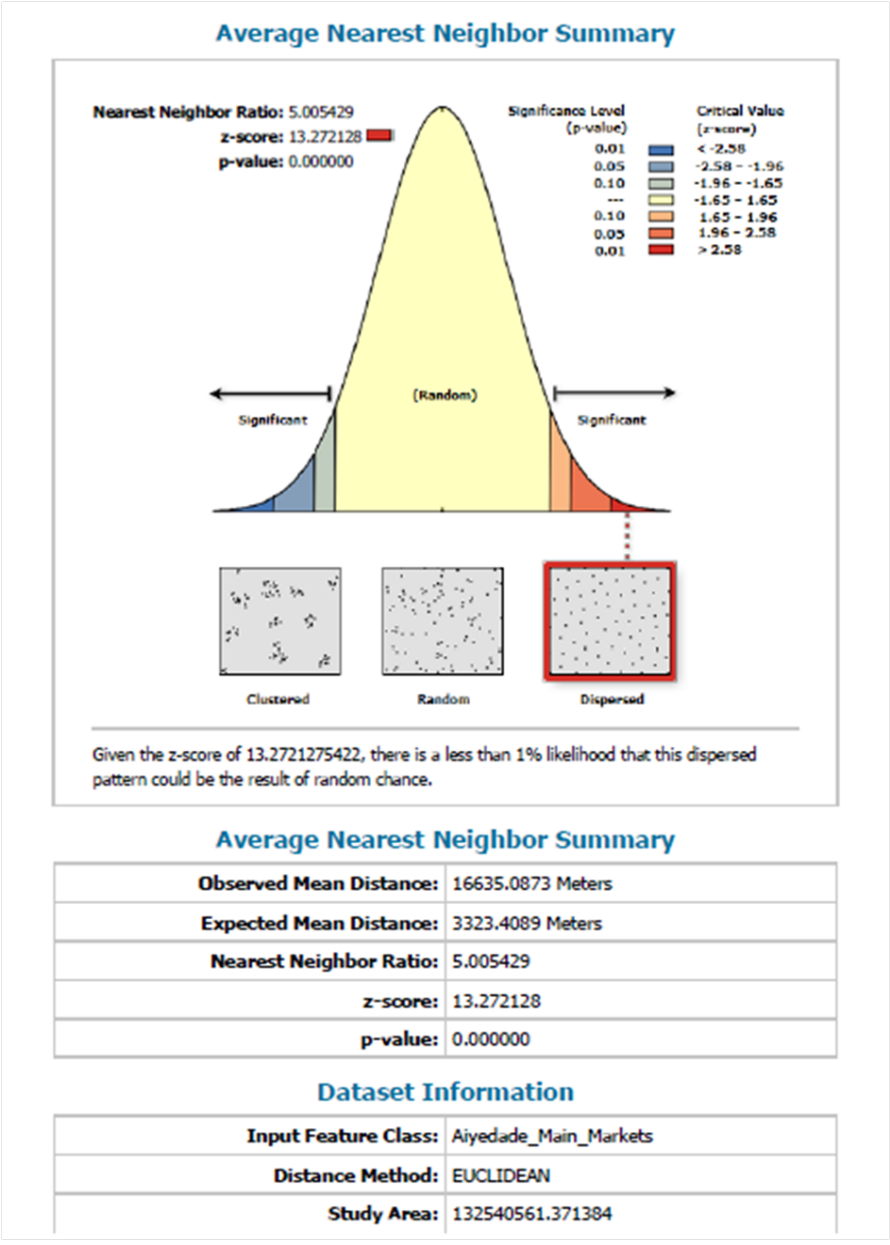

Figure 2. Results of Average Nearest Neighbour on Distance Travel to Main Market in Ayedaade Local Government Area of Osun State

In order to determine the average distance of the nearest main market to each of the sampled rural settlements in Ayedaade Local Government Area, using the 'Ruler' menu of ArcGIS 10.3.1, the result of Average Nearest Neighbourhood Analysis reveals that the Observed Mean Distance to access market patronised is: 16,635 metre, compared to Expected Mean Distance travel of: 3,323.4089 metre. The pattern of distribution of existing markets patronised by rural households in Table 4 shows that it is dispersed rather than random distribution. This implies that rural households in Ayedaade Local Government Area of Osun State would travel considerable distance to access market to trade their goods. Given the Z-Score of 13.2721, there is less than 1% likelihood that this dispersed pattern could be the result of random chance. The result of this analysis is tangential to the study of the socio-economic facility, particularly distribution pattern and accessibility of students to secondary educational facilities in Lokoja, in north central Nigeria, where Adetunji and Aloba (2018) reported that in adequate provision of secondary educational facilities had resulted to long distance commuting to those residents where such facility is lacking.

Determinants of Factors affecting Markets Patronised by Traders in the Study Area

Factor Analysis was employed to determine most significant factors/ variables influencing the markets patronised by traders in Ayedaade Local Government Area of Osun State. Factor Analysis can be described as a technique to condense data presented in many variables into few variables. It can also be regarded as method of reducing the dimension of data collected into one or more super or principal variables. In the interpretation of Factor analysis, variable that has high weight value for a subset of variable is consider as the principal factor (Qualtrics, n.d.).

Some of the variables loaded and considered to be factors influencing market patronised include market characteristics (types of goods traded in the market; origin/area or locality where goods brought to the market come from; population of traders who patronise each market). These market characteristics are highly essential because the goods traded in the market will determine the population of traders that patronise a particular market for their business transactions. Also, the centrality or location of the market also plays a significant role in market consideration for sales of goods. Similarly travel characteristics was being considered to be important factors and therefore included in factor analysis (nature of road network connecting villages to the market; Mode of transport accessible to traders and transport fare to the market). Generally, the nature of rural road networks connecting the main market to different communities where traders reside will determine to a large extent whether the market will be considered or patronise by traders for their business transactions or not. Market located on all-weather road may likely attract more traders than the one located on poor rural roads. The types of transport services accessible to traders (walking, motorcycles, pick up), will determine the distance covered, quantity of goods traded to the market as well as the transport fare that may likely be expended on their journey. Motorcycle is the main mode of public transportation in rural communities in Ayedaade Local Government Area because of the poor connectivity to the main market in the council area. Pick –Up Van is also available in few rural communities and carry an average of 10-12 passengers and operates only on market days. The motorcyclist that operates on all categories of roads in the study area charged exorbitant transport fare on traders as well as good conveyed. This indirectly makes main market less accessible to traders who transverse on long distance from their villages to

engage in their business transactions. Similarly the longer the distance travelled to the market, the more the time they are likely to be spent on transit, the less accessible trader is to the market due time wasted on the journey. All these factors mentioned above determine to a large extent on the factors influencing market patronised by traders in the council area. The socio-economic characteristic of market traders included in factor analysis which is directly related to travel characteristic was the member of household responsible for the movement of goods to the market.

Table 4a and 4b reveal that six factors whose eigenvalue are greater than 1 constituted 65.77% of the total variance and it is responsible for factors affecting preference of market patronised by traders in the study area. Variables heavily weight loaded on factor 1 is directly related to the types of goods traded in the market that influence the market patronised by traders in the council area (Table 4b). This accounts for about 15.73% of the total variance (Table 4a). The second weight variables that are majorly associated with transport characteristics is the type of road networks connecting sampled villages to the main market that determines the market patronised in the study area. This contributes to about 12.76% of the total variance (Table 4a). Third weight variables relates to the origin of the goods traded in the market (0.582). This Third Factor accounted for 12.34% of the total variance of the factor influencing markets patronised by traders in the study area. The fourth weight variables loaded on factor analysis relates to location of market patronised and the fifth weight variables loaded on Factor analysis is type of market patronised whether periodic or daily market.

Table 4a. Result of Total Variance Explained of Market Patronised in Ayedaade Local Government Area

Factor Analysis- Principal Component Analysis Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.517	15.730	15.730	2.517	15.730	15.730
2	2.042	12.762	28.492	2.042	12.762	28.492
3	1.977	12.358	40.850	1.977	12.358	40.850
4	1.622	10.140	50.989	1.622	10.140	50.989
5	1.329	8.307	59.297	1.329	8.307	59.297
6	1.036	6.475	65.772	1.036	6.475	65.772
7	.952	5.949	71.721			
8	.826	5.166	76.886			
9	.724	4.526	81.412			
10	.653	4.080	85.492			
11	.616	3.849	89.341			
12	.514	3.215	92.556			
13	.429	2.683	95.239			
14	.322	2.013	97.253			
15	.281	1.758	99.011			
16	.158	.989	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix (a)

	Component					
	1	2	3	4	5	6
Do you have market in your village?	.171	-.169	.192	**.514**	.538	.332
Size (population of the above named market	.478	-.037	.415	.413	-.167	.137
Where do most of the traders come from ?	.105	-.397	**.582**	-.191	-.272	-.217
Mode of transport to the market	-.010	-.087	.276	.306	-.518	.010
Cost of transportation to the market	.319	.166	-.173	.471	-.336	-.099
Trip frequency to market	-.347	-.040	.316	-.051	.290	-.424
Type of products traded in the market	.550	-.281	.505	-.120	-.216	.011
Types of agricultural products mostly traded in the market	.417	-.441	.338	-.344	.182	.078
Are these products produced locally (within the LGA	**.732**	.421	-.077	-.157	.151	-.147
Where does the good traded in the market come from	.721	.241	-.145	-.009	.183	-.412
Time spent to reach the market patronised	.337	.375	-.249	.186	-.200	.341
Members of household responsible for movement of farm products to the market	.490	.271	-.033	-.491	.118	.169
Type of market patronized	.086	-.157	.255	.477	**.516**	.014
Type of road networks connecting your village to the main town	-.226	**.718**	.476	.118	.092	-.243
Condition of road surface	-.223	.682	.572	.037	-.072	.035
How often is the road maintained?	-.183	.295	.383	-.396	.061	**.518**
Extraction Method: Principal Component Analysis.						
a. 6 components extracted.						

Table 4b. Result of Component Matrix (a) of Market Patronised by Traders in Ayedaade Local Government Area

Mode of Transportation to Markets in Ayedaade Local Government Area

More than 70% of traders especially women relied on public transport services to convey their goods to the market. At a more disaggregate level, not less than 60% of traders rely on motorcycle for movement of their products to the market in the study area. High demand for motorcycle for transportation in the study area had forced many of the traders (women) to book an appointment with motorcyclists ahead of the market day in order to have an opportunity to convey their goods to the market. Approximately 21.3% of traders indicated that they conveyed their goods to the market by pick-up truck/vans. Table 5 revealed that traders who patronised Odeyinka market used more of pick-up truck or vans as means of the transportation to market. This is because the road connecting the villages to Odeyinka is movable throughout the whole year compared to some other rural communities. Less than 10% of women in the rural communities trekked to markets and travelled several kilometres to engage in commercial activities.

Count													
		Mode of transport to the market										Total	
		Foot		Bicycle		Motorcycle		Pick-up		Car			
		#	%	#	%	#	%	#	%	#	%	#	%
Names of the market(s) patronised	ARAROMI	3	20.0	1	6.7	9	60.0	0.	0.0	2	13.3	15	100.0
	ODEYINKA	0	0.0	0	0.0	4	66.7	2	33.3	0	0.0	6	100.0
	OLUFI	10	5.5	4	2.2	117	64.6	41	22.7	9	5.0	181	100.0
Total		13	6.4	5	2.5	130	64.4	43	21.3	11	5.4	202	100.0

Table 5. Market (s) Patronised and Mode of transportation used to the markets

Table 6 revealed that the mode of choice of transportation to market vary (Possession of Personal Means of Transport, F=1.482 <P. 209; Transport Cost. F=7.156<. 000; Market Patronised, F=1.037<. 389; Where Goods Traded Come from; F=3.722<p.006 and Distance from Villages to Market, F=1.606, <p. 174) across the sampled settlements in the study area. Generally women are less accessible to personal means of transportation. This is because men tend to monopolise transport services available to household member. The distance from villages and types of goods traded in the market depend on the choice of transportation of traders in the area. Even though, motorcycles predominate the transport services available to traders in the study area, many of the traders interacted with claimed that they prefer to use pick up vans or trucks and Austin diesel vehicle which can carry more passengers and their goods to the market.

Table 6. Result of Analysis of Variance on Mode Choice of Transportation

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Do you have personal means of transportation?	Between Groups	1.255	4	.314	1.482	.209
	Within Groups	41.715	197	.212		
	Total	42.970	201			
Cost of transportation to the market	Between Groups	26.169	4	6.542	7.156	.000
	Within Groups	180.108	197	.914		
	Total	206.277	201			
Type of market patronized	Between Groups	.459	4	.115	1.037	.389
	Within Groups	21.700	196	.111		
	Total	22.159	200			
If no, where does the good traded in the market come from?	Between Groups	38.574	4	9.643	3.722	.006
	Within Groups	510.362	197	2.591		
	Total	548.936	201			
If no what is the distance of market(s) patronised to your village?	Between Groups	2.912	4	.728	1.606	.174
	Within Groups	89.271	197	.453		
	Total	92.183	201			

Transport Fare to Market in Ayedaade Local Government

The transport fare to market in Ayedaade Local Government Area of Osun State must be interpreted with caution. This is because majority of public transport operators charge freight carried separately from the trader hiring the vehicle. In actual fact, the public transport operators charge transport fare based on the quantity of goods and distance travelled to the market. Table 7 revealed that 13.4% of traders claimed that they do not pay any transport fare to and from the market. This category of market women are petty traders who trek from their villages to the markets to engage in their business transactions. Majority of these traders come from Mokore, Mojapa and Wakajaiye villages. Further analysis revealed that 20.8% of traders spend less than N 100.00 on transport fare to the market. This is equivalent to 0.52 USD on transport fare on journey to the market. Table 7 further revealed that 30.7% of traders spend more than N 200.00 on transport fare to market apart from the fare charge on freight conveyed to the market. This implies that this category of traders spent an average of 1.04 USD on transport fare on their return journey to market. This transport fare charge by public transport operators can be regarded to be too outrageous considering the distance travelled, quantity of goods carried in the council area as well as the economic situation in Nigeria where more than 70% of their population earned below 1.90 USD per day to move above the poverty line

Table 7. Cost of transportation to the market in the Study Area

Count										
		Cost of transport to the market								
		None		Less than ₦100		₦100- ₦200		More than ₦200		Total	
Name of Settlement or Village		#	%	#	%	#	%	#	%	#	%
	AKIRIBOT	2	7.4	5	11.9	8	11.3	0	0.0	15	100.0
	ALABE PA	1	3.7	0	0.0	9	12.7	5	8.1	15	100.0
	BENBE	0	0.0	1	2.4	12	16.9	1	1.6	14	100.0
	LAGBAKA	1	3.7	1	2.4	8	11.3	6	9.7	16	100.0
	LOODE	1	3.7	2	4.8	0	0.0	13	21.0	16	100.0
	MOJAPA	5	18.5	2	4.8	0	0.0	10	16.1	17	100.0
	MOKORE	5	18.5	9	21.4	1	1.4	0	0.0	15	100.0
	OGBAAGA	0	0.0	2	4.8	13	8.3	0	0.0	15	100.0
	OLOBA	0	0.0	7	16.7	5	7.0	4	6.4	16	100.0
	OLUWADA	3	11.1	8	19.0	6	8.4	0	0.0	17	100.0
	SARE	0	0.0	1	2.4	2	2.8	12	19.5	15	100.0
	SEWE	5	18.5	0	0.0	0	0.0	11	17.7	16	100.0
	WAKAJAYE	4	14.8	4	9.5	7	9.9	0	0.0	15	100.0
Total		27	13.4	42	20.8	71	35.1	62	30.7	202	100.0

Note: 1 USD= 389.5677 NGN 1 NGN= 0.0026USD

as stipulated by the United State of America (World Bank 2014; Ferreira, Jolliffe, and Prydz 2015). Interaction with some traders revealed that some of the commercial transport operators use the advantage non- availability of community based transport services to charge exorbitant transport fares at the detriment of traders in the study area. A large proportion of these traders come principally from Loode, Sare, Sewe and Mojapa villages.

CONCLUSION AND PLANNING IMPLICATIONS

This study examined travel characteristics of women to markets in some rural communities in Ayedaade Local Government Area of Osun State. The research present or expose the challenges encountered by traders on transit during their business transactions so that the stake holders can provide urgent attention in order to achieve sustainable rural development in the region. Primary and secondary data were utilised for the study. Descriptive statistics such as table of percentages and cross tabulation were used to explain market characteristics. Factor Analysis was used to determine the principal or main heavily weight variables affecting market preference or patronised by traders for their business transactions. Findings revealed that traders trekked long distances to the market and women relied more on motorcycles for their trips. Public transport operator's charges indiscriminate fare for movement of freight to the market. Olufi market is the main periodic market patronised by traders in the council area because of distance and varieties of goods traded in the market. The study recommends that some of the dead markets in the study area should be re -fertilised or encouraged and possibly provided with well linked transport infrastructure in order to promote rural development in the region. The study concludes that there is need to provide community based transport services particularly motorcycle that constitutes the main mode of transportation in the study area at subsidized rate for rural communities in Nigeria. This will enhance the accessibility of women to markets and participate in order productive activities in the rural areas of Nigeria.

References

Adetunji, M. A. 2003. "Geographical Analysis of Rural Transport and Accessibility in Ayeedaade Local Government Area of Osun State." Unpublished M.Sc. Thesis, The Department of Geography, Obafemi Awolowo University, Ile-Ife.

Adetunji M. A., and O. Aloba. 2018. "Analysis of the Distribution Pattern and Accessibility of Students to Secondary Educational Facilities in Lokoja, Kogi State, Nigeria." *Journal of Analele Universităţii din Oradea -Seria Geografie*, XXVIII (1): 113-124.

Astrop, A.; C. Palmer, D. Maunder, and D. M. Babu. 1996. "The Urban Travel Behaviour and Constraints of Low Income Households and Females in Pune, India." In *National Conference on Women's Travel Issues*, Baltimore, Maryland, USA, 23 - 26 October, 1996. Transport Research Laboratory, Crowthorne Berkshire United Kingdom. Working Paper PA3206/96. Available at: https://assets.publishing.service.gov.uk/media/5cdd30ac40f0b63816dc765c/1_644_PA3206_1996.pdf

Dawson, J., and I. Barwell. 1993. *Roads Are Not Enough: New Perspectives on Rural Transport Planning in Developing Countries.* London: Intermediate Technology Publications.

Dey, T., A. K. Pathak, and N. K. Baghmar. 2017. "Geospatial Analysis of Rural Weekly Markets: A Case Study of Bametara District of Chhattisgarh, India." *IOSR Journal of Humanities and Social Science*, 22(5) Ver.II (May 2017): 45-53. http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2022%20Issue5/Version-2/G2205024553.pdf

Donnges, C., G. Edmonds, and B. Johannessen. 2007. *Rural Road Maintenance - Sustaining the Benefit of Improved Access*. Bangkok: International Labour Organization. https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_bk_pb_226_en.pdf

Ellis, S. 1996. "The Economics of the Provision of Rural Transport Services." Ph.D. thesis. Cranfield University, U.K.

Ellis, S. 1997. *Key Issues in Rural Transport in Developing Countries*. TLR Report 260. Berkshire: Transport Research Laboratory. https://assets.publishing.service.gov.uk/media/57a08db540f0b652dd001afe/TRL260.pdf

Ferreira, F., D. M. Jolliffe, and E. B. Prydz. 2015. "The international poverty line has just been raised to $1.90 a day, but global poverty is basically unchanged. How is that even possible?" *World Bank Blogs*. https://blogs.worldbank.org/developmenttalk/international-poverty-line-has-just-been-raised-190-day-global-poverty-basically-unchanged-how-even

Peters, D. 2013. *Gender and Sustainable Urban Mobility*. Thematic Study Prepared for Global Report on Human Settlements 2013. http://civitas.eu/sites/default/files/unhabitat_gender_surbanmobilitlity_0.pdf

Pucher, J. 2009. "Cycling and Walking for All New Yorkers: Path to Improved Public Health." Key note address for Fit City Conference, New York.

Starkey, P., S. Ellis, J. Hine, and A. Ternell. 2002. *Improving Rural Mobility : Options for Developing Motorized and Nonmotorized Transport in Rural Areas*. World Bank Technical Paper no. 525. Washington: World Bank.

Qualtrics. n.d. "What is factor analysis and how does it simplify research findings?" Accessed September 1, 2019. https://www.qualtrics.com/experience-management/research/factor-analysis/

Tracey-White, J. D. 1995. *Retail Markets Planning Guide*. FAO Agricultural Services Bulletin 121. http://www.fao.org/3/V8390E/V8390E00.htm#Contents

World Bank. 2014. *World Bank on poverty in Nigeria. Poverty and Transportation: A way forward*.

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Nijerya - Osun Eyaleti Ayedaade Yerel Yönetim Bölgesi Kırsal Topluluklarda Kadınların Yerel Pazarlara Seyahat Davranışı

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Özet

Bu çalışma, Nijerya'da bulunan Osun Eyaleti'nin Ayedaade Yerel Yönetim Bölgesindeki bazı kırsal topluluklarda kadınların yerel pazarlara erişilebilirliğini incelemektedir. Bu araştırma için hem birincil hem de ikincil verilerden oluşan üç veri seti kullanılmıştır. İlk veri seti, cinsiyet kompozisyonu, eğitim seviyesi ve kişisel ulaşım araçlarına sahip olma gibi kırsal kesimde yaşayanların sosyo-ekonomik özelliklerine odaklanmaktadır. İkinci veri seti, yerel pazara gitmek için kat edilen mesafe, en çok kullanılan ulaşım şekli, ortalama seyahat süresi ve bir hafta içinde pazara gitme sıklığı gibi özellikleri dikkate alarak kırsal nüfusun yerel pazarlara seyahat modeline odaklanmaktadır. Son veri seti ise, kadınların bölgedeki yerel pazar merkezlerine erişim kısıtlamasına dayanmaktadır. Verileri analiz etmek için betimleyici ve çıkarımsal istatistik yöntemler kullanılmıştır. Bulgular, inceleme alanında Olufi merkez pazarında tarımsal ürünlerin ve az sayıda mamul malın ticaretinin yapıldığını göstermektedir. Kadınların %60'ından fazlası mallarını pazarlara taşımak için toplu taşıma hizmetlerini kullanmaktadır. Kırsal topluluklardaki kadınların %30'u pazarlara yürüyerek erişmekte ve ticari faaliyetlerde bulunmak için kilometrelerce yol kat etmektedir. Ayedaade Yerel Yönetimi'nin kırsal bölgesindeki pazarlara ulaşım biçimlerinde cinsiyet farklılıkları gözlemlenmektedir. Kırsal nüfusun çoğu, bölgedeki ulaşım hizmetlerinin seyrek çalışması nedeniyle tarımsal ürünlerinin transit olarak azaldığını iddia etmektedir. Bu nedenle çalışma, kadınların pazarlara erişimini ve Nijerya'nın kırsal bölgelerindeki diğer üretim faaliyetlerine katılımını artırmak için Nijerya'daki kırsal topluluklara yönelik sübvanse edilmiş toplum temelli ulaşım hizmetleri sağlanmasını önermektedir.

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