Land Management gaps accounting for persistent open-air trading in rural markets of North-Central Nigeria

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Key words: Land Management, Open-air trading, Rural markets, Ajaka market

SUMMARY

Rural markets in North-Central Nigeria have played crucial role in the distribution of farm produce, industrial raw materials and household goods. However, the persistence of open-air trading and its attendant risks call for land management interventions. Using a case study of Ajaka market in North-Central Nigeria, primary data were harnessed from stakeholders comprising market traders, customers, and the local premises managers. Findings indicated that the top-five drivers of persistent open-air trading comprise absence of formal space planning standards, violation of easements, absence of modern infrastructure, and poor development. In response to these and other land management gaps, six major toolkits proffered by stakeholders to address this gap include space management, development control, land allocation, market redevelopment, dispute resolution, and land use mapping and planning. In addition, one-way ANOVA tests indicated a consensus among the stakeholders with respect to land management gaps and toolkits for intervention. It was recommended that these toolkits for intervention should be implemented in phases and in consultation with all stakeholders in order to uplift the status of rural markets and ameliorate the persistence of open-air trading. The study was concluded by urging stakeholders to hold local government councils accountable for the revenue generated from rural markets as these funds could be used to defray the cost of implementing each land management toolkit.

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1. INTRODUCTION

In Africa's rich heritage, rural markets provide that supportive framework for the exchange of agricultural as well as consumer goods and services. Market in the context of this study is an infrastructure accommodating numerous individuals who have converged solely for the purpose of transacting business. It is pertinent to note that market infrastructure requires land for successful take-off and operation and as such underscores the import of land management practice. FIG (1999) defines land management as a plethora of activities geared towards the management of land resources for the purpose of meeting the environmental and economic goals of sustainable development. Hence, good land management practice is a key driver of enterprise, market operability, economic growth, and environmental sustainability.

Recent observations across Nigerian rural markets indicate that Local Government Councils and agencies in charge of managing these market infrastructures have not adequately addressed the land management gaps accounting for open-air trading let alone the standard requirements for shopping. This paper is aimed at identifying land management gaps accounting for the persistence of open-air trading in rural markets in North-Central Nigeria with a view to recommending appropriate tools capable of addressing these gaps. Specific objectives for this paper include identification of these land management gaps; evaluating the order of importance of these gaps; impact assessment of open-air trading; and evaluation of land management toolkits for the resolution of the problem.

Paradigms of open-air trading are not peculiar to Nigeria alone. With reference to post-communist Europe, Sik and Wallace (1999) observed that such marketplaces are often disorganized and characterized by poor infrastructure; albeit historical antecedents account for the location of the organized variants of these markets in specific urban centres. The author's personal experience in the municipality of Enschede in the Netherlands reveals that traders in the open market organize their merchandize under temporary sheds and pack their goods and sheds at the end of official trading hours to pave way for clean-up of the entire market. Similarly, paradigms of open air markets in Thailand are characterized by outdoor display of consumable goods (Minami et al, 2010).

Adopting Ajaka market in North-Central Nigeria as a case study, this research was conducted to address the dearth of indigenous- and nascent researches on challenges of open-air trading in rural Africa from a land management perspective. By drawing upon local and international issues

of market premises management, planning and development, this study stirs up debate into how markets should be re-positioned worldwide to enhance commercial competitiveness of rural areas and sustain the ability of municipal councils to generate revenue.

2. THEORETICAL FOUNDATION

2.1 Concept of open-air trading

Adaptive definition from the 6th Edition of the Oxford Advanced learner's dictionary of the English Language indicates that open-air trading is the process of selling goods and services outside rather than inside a purpose built structure. Although open-air trading is as old as mankind on earth, the era of globalization implies that places should repackage infrastructure for the selling of goods and services for the purpose of sustaining the attraction of final consumers and industrial users of raw materials. However, the prevalence of open-air trading in some rural African settlements to date indicates the absence of place packaging and marketing. In other words, while open-air trading is a characteristic of rural markets in Africa, the modern trend of events demand that our markets be re-branded and re-packaged in order to be locally unique and internationally competitive.

2.2 Categories of rural markets

Tomori (1997) categorized markets into regional shopping centres, conventional/modern markets, neighbourhood markets, and traditional markets. This study addressed traditional markets which were further outlined by Tracy-White (2003) to include Farm-gates, Local (primary) markets, and Assembly markets. Explanation put forward by Tracy-White (2003) was that while farm-gates provide direct access to purchasers of foods harvested from the farm, Local markets are located centrally in a village or along a rural access road for easy customer reach. These Local markets are characterized by periodic convergence which affords retail distribution of food and other consumer goods. Transcending in the hierarchy of rural market is the assembly market which Tracy-White (2003) described as channel for the distribution of large scale consumer goods to local and long distant purchasers. With particular emphasis on North-Central Nigeria, assembly markets are situated along major thoroughfares and highways, and may operate on periodic basis like Local markets depending on historical antecedents. Therefore, this research views Ajaka market as a paradigm of an assembly market owing to its location along the Idah-Anyigba highway in North-Central Nigeria.

2.3 Adaptive development process for rural markets

Tracey-White (2003) provided a model for the development of rural markets commencing with an identification of the need for rural market, and including other stages such as assessment of requirement for market trading, evaluation of space requirements, site selection and preparation, building and infrastructure planning, conducting viability appraisals, supervision of construction

works, and operation and maintenance of the market upon completion. These processes are also vital during market upgrade/regeneration. Besides the reliance of these activities on land management tools, a cursory examination reveals a strong link between activities in that model and competence areas of a development surveyor.

2.4 Land management gaps and associated menace

For the purpose of this study, ten land management lapses accounting for open-air trading in rural markets have been identified to include failure of the land market towards allocating market space, incidence of squatter traders and hawking, weak enforcement machinery of development control, lack of clearly defined space planning standards, violation of easements, evasion of market taxes and levies, dilapidating market infrastructure, absence of modern infrastructure, local council's mismanagement of revenue generated from the market and poor enforcement of environmental protection measures.

Barlowe (1986) emphasized that the scarcity of land resources is a major driver for its allocated among various uses. Consequently, Harvey and Jowsey (2004) theorized that one of the functions of the property market is to allocate resources and interests in landed property to the highest and best use which from an economic perspective should be anchored on equilibrium price and quantity. Contrary to these thoughts, imperfections in the land market may not necessarily warrant economic allocation of rural market space. In the event of land expropriation for future expansion of existing markets, the author agrees with van der Molen (2002) that local councils should exercise a working knowledge of land ownership structure in order to address resettlement and/or compensation issues that may arise.

A corollary to the first lapse is insecurity of tenure and rights to market space which has triggered the activities of squatter traders and hawkers let alone the persistence of open-air trading. While some rural markets in Africa evolve from the open-air arrangement to substandard stalls, it is imperative that improved standards, future expansion, and the need to accommodate new traders and products should be the goal of stakeholders. Tracy-White (2003) however identified financial constraint as an impediment to this progression in land use.

Studies conducted by Egbu, et al. (2006) and UN-Habitat (2004) indicate that the distortion of land markets and an upsurge in informal developments ensues when private developers take undue advantages of the loopholes in physical planning policies of the state. Hence, the weak enforcement machinery of development control can constitute a serious driver of persistent open-air trading in rural markets.

Wustemann (2004) identified space planning and management as the most conspicuous part of a facility manager's job. An import of space management concept into rural markets should be viewed within the framework of shopping space as against workspace. While Tracy-White (2004) underscored the importance of matching quantitative space planning with consultations

with various stakeholders in the market development, adequacy of market space has continued to pose a major challenge to traders in African rural assembly markets especially during peak sales periods. These challenges include dangerous parking and congestion of vehicles along highways fronting these markets let alone other physical impediments to pedestrian traffic.

A corollary to the problem of space standards is the violation of easements. Although Klessig and Kroenke (1999) reiterated that ownership of property automatically confers easement right relative to an adjoining property, it may not be out of place to observe that a lessee of market space can exercise easement rights relative to an adjoining lessee in the market. Hence, all users of market space have equal easement rights. To support this assertion, Umeh (1977) had earlier in his work captured the essence of this issue using the Latin maxim "*sic utere tuo ut alienos non laedas*" which implies that parties should be wary of tortuous liabilities associated with land use. The two vital easements for successful use of rural markets are right to light and right-of-way. While there may be no serious constraint to natural lighting in rural markets in the course of day-time transactions, right-of-way in Africa's rural assembly markets has attracted high rate of violations. Besides inducing affected traders to reap low turnovers, abuse of easement rights is capable of ruining trader-trader or customer-trader relationships.

In addition to the establishment and regulation of markets, Local Government Councils in Nigeria are constitutionally vested with revenue generation from the market premises. Common among these revenue sources include rents and service charges on market stalls/warehouses, licensing fees, and tolls for market users. It has become difficult for most Local Governments to fund repairs and maintenance of assembly markets in their domain owing to lack of political will and incompetence of local administrators.

According to Tomori (1997) and Okoh and Egbon (2005) infrastructural problems associated with operating rural markets in Nigeria include dilapidated market buildings and infrastructure; and the absence of fencing, security, clinics, banks and police stations among others. These gaps tend to create unsafe and inconvenient atmosphere for market transactions.

Open-air trading exposes traders to health risks associated with intensive sunlight, rainfall and dust haze. In addition, the nature of a market environment influences the possibility or otherwise of open-air trading and food hawking. The lack of political will on the part of local councils towards devising fiscal tools of land use controls has triggered the selling of goods in the open with attendant risk of spoilage and indiscriminate disposal of waste. Absence of fencing for the market premises also engenders free flow of food hawkers and unlicensed traders who take advantage of the same open square to transact business. These gaps in proactive land management raise serious concern for hygiene and safety in rural markets and are further compounded by public health officers who rarely perform their duties within the rural market.

2.5 Combating open-air trading with land management tools

Within the framework of land management tools identified by Ferguson (2000), van der Molen (2002) and Sevatdal (2002), this study has been able to distil land management tools for combating open-air trading to include: land information system; land use mapping and planning; land allocation (consolidation); market redevelopment; development control; space management; land value capture; taxation and fines; land expropriation and compensation; and dispute resolution. This study examined the perception of respondent towards these land management tools for combating the persistence of open-air trading.

3. THE STUDY AREA

Ajaka the headquarters of Igalamela-Odolu Local Government Area of Kogi State in North-Central Nigeria is geo-referenced as latitude $07^{o}10'00''N$ and $07^{o}10'16''N$ and longitude $06^{o}49'52''E$ and $06^{o}50'12''E$ and is about 12.90 Kilometres from Idah, the traditional seat of the Igala kingdom. The rural township of Ajaka is flanked by Ugwolawo in the North-East, Ogbogba in the North-West, and Ogbogbo and Oforachi in the South-West and South-East respectively. Located along the Niger-Benue through and within the semi-equatorial climate, Ajaka is characterized by guinea savannah vegetation, high relative humidity and substantial annual rainfall in the months of April to October. Dry season commences in November and ends around March annually, while annual temperature ranges between 21.50 ^{o}C and 32.9 ^{o}C. Ajaka is among the oldest settlements in the Igala kingdom which evolved as a result of migration of people of Igala tribe and dialects who later forged a common identity and cultural heritage. The *Etemahi* is the traditional ruler of Igalamela with palace at Ajaka. In consultation with the district heads, he administers his domain. The settlement pattern of Ajaka is a combination of dispersed and nucleated forms which foster closer ties among extended family members. With a predominantly agrarian economy producing cash crops like cashew nuts and oil palm for export and palm oil processing, the cultivation of staple foods like maize, guinea corn, sorghum, cowpea, yam, sweet potatoes, cassava, banana, and groundnut is predominantly at subsistence levels due to poverty and lack of farming incentives. Ajaka market located along Idah-Anyigba highway is as old as Ajaka district. It is an assembly market operated in the interval of four days. The market attracts local farmers, producers, and distributors of food, household items, and industrial raw materials. Notwithstanding its status as one of the oldest markets in Igala land, trading still takes place in the open as a result of certain land management lapses. In response to this identified problem, this paper advocates for the use of land management tools in curbing open-air trading in order to bring about a re-engineered heritage and local economic empowerment.

4. METHODOLOGY

For the purpose of this study, the sample frame comprises three independent entities: the community and consumers, market traders and market premises managers. It was however difficult to obtain the population estimate of traders in Ajaka market due to the absence of a trader's union. To surmount this limitation, a census survey of traders during peak market periods of 2:00pm was conducted for 41 market days between March and September 2011.

Results indicated a mean population of 4,099 traders with a corresponding standard deviation of 298 traders. Sample size of traders was drawn for this study using equations 1 – 3 exemplified by Cochran (1977):

$$n = \frac{n_o}{1+(n_o/N)} \quad (1)$$

where $n_o = (S^2)/(V^2)$ (2)

and $S = p(1 - p)$ (3)

In equation 1, n = sample size; n_o = approximate representation of sample size; and N = mean population of traders. With respect to equation 2, n_o retains its original meaning as in equation 1; while V = standard error of sampling distribution, and S = the maximum standard deviation from estimated proportion of market traders. S in equation 3 retains its original meaning as in equation 2, while the probability of success and failure in the sample proportion of traders is expressed as p and $(1 – p)$ respectively. To arrive at a sample size of 151 traders, the parameters N = 4,099, V = 0.02, and p = 0.5 were applied to equations 1 – 3 respectively.

Information on population of Ajaka district was not available. Therefore, a sample size of 384 persons representing customers/the general community was determined using equation 4 for sampling proportion on assumption of 5% error and a corresponding z score of 1.96.

$$n = p(1-p)\left(\frac{z}{e}\right)^2 \quad (4)$$

In equation 4, n, p and $(1 – p)$ retain the same meaning as in equations 1 and 3 save for e and z which connote significance level in the estimate of population proportion and normal distribution score respectively. Owing to the unknown population and risk of non-probability sample, a 0.5 estimate of population proportion was deployed for p in equation 4.

Individuals who take land management decisions in the market are descendants of the district head called "*Gago*" in the Igala language. Information from the market chief (*Onuh Aja*) indicated that 23 members of his clan currently assist him in the management of the market premises. Hence, all the 24 market premises managers were purposively adopted as sample size for this group of the study population to surmount the risk of small sample size.

Due to the high incidence of illiteracy in the study area, the author utilized structured interviews in lieu of questionnaire in eliciting information from respondents. These structured interviews were administered by ten (10) HND Estate Management students of the Federal Polytechnic, Idah who were proficient in the Igala language and have received basic training in the art of survey instrumentation. The choice of field assistants was informed by the need to surmount language barrier when they encounter interviewees with limited communication skills in the English Language. Table 1 provides a summary of the sample size and successful interview granted.

An assessment of measurement scales adopted for the research instruments of land management gaps and toolkits for intervention indicated Cronbach's reliability coefficients of 0.7769 and 0.7560 respectively and are adjudged acceptable in consonance with the criteria explained by George and Mallery (2003).

Table 1: Sample size and Structured interviews successfully granted

Study group	Sample size	Interviews successfully granted
Traders	151	92
Community/Customers	384	215
Market premises managers	24	18
Total	559	325

5. RESULTS

5.1 Background information of respondents

Inference from background information of respondents in Table 1 indicates that 70.7% of traders are females while 29.3% are males. Background information from members of Ajaka community who are virtually regular customers of the market indicates that 58.6% are women while 41.4% are men. This is in agreement with the traditional African heritage which places women ahead in commerce and business activities (Oladeebo, 2008). Contrary to the aforementioned, all the local premises managers of this market are men.

Table 1: Gender classification of respondents

Category of respondents	Gender				Total	
	Female		Male			
	Freq.	%	Freq.	%	Freq.	%
Traders	65	70.7	27	29.3	92	100.0
customer/community	126	58.6	89	41.4	215	100.0
premises managers	0	0.0	18	100.0	18	100.0

Source: Survey data, 2011

Analysis of the highest educational training of respondents indicated that over 40% of traders and customers have never had any formal education. In addition, at least 30% of traders and customers have had primary education contrary to 50% of the market premises managers in the same educational class. 12%, 14.4% and 11.1% of traders, customers and premises managers respectively have had primary education. 5.6% to 7.6% of each class of respondent possess vocational skills while those with higher educational qualifications are ranged between 3.3% and 5.6%. Inference can be drawn from Table 2 that majority of the local premises managers in Ajaka market lack basic vocational and academic training in retail property management.

Table 2: Educational background of respondents

Category of respondents	Highest educational training received										Total	
	No formal education		Primary education		Post-primary education		Vocational education		Higher education			
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Traders	43	46.7	28	30.4	11	12.0	7	7.6	3	3.3	92	100
Customers/community	92	42.8	67	31.2	31	14.4	15	7.0	10	4.7	215	100
Premises managers	5	27.8	9	50.0	2	11.1	1	5.6	1	5.6	18	100

Source: Survey data, 2011

With reference to Table 3, it can be further deduced that average trading experience of traders and vendors in the market is put at 18.05 years. Customers of the market and other members of the host community who patronize the market have had an average shopping experience of at least 20.40 years. It is further deduced that rural market premises managers have amassed an average of 26.33 years experience.

Table 3: Experience of respondents with respect to their activities in the market

Category	class interval		Freq	%
Traders				
(Years of trading experience)	1 – 5		6	6.5
	6 – 10		9	9.8
	11 – 15		17	18.5
	16 – 20		21	22.8
	21 – 25		26	28.3
	26 – 30		11	12.0
	Over 30		2	2.2
	Total		92	100.0
	Mean	18.05		
Customers/Community members				
(Years of shopping experience)	1 – 5		3	1.4
	6 – 10		7	3.3
	11 – 15		45	20.9
	16 – 20		67	31.2
	21 – 25		32	14.9
	26 – 30		44	20.5
	Over 30		17	7.9

	Total		215	100.0
	Mean	20.40		
Premises managers				
(Years of Land/Market premises management experience)	1 – 5		0	0.0
	6 – 10		0	0.0
	11 – 15		3	16.7
	16 – 20		1	5.6
	21 – 25		2	11.1
	26 – 30		5	27.8
	Over 30		7	38.9
	Total		18	100.0
	Mean	26.33		

Source: Survey data, 2011

These background information in Tables 1 – 3 provide the basis for credibility in the analysis of other research data.

5.2 Priority of Land management gaps

Analysis was carried out to ascertain the priority accorded the major land management lapses accounting for persistent open-air trading in rural assembly markets. In order of priority, Table 4 indicates the harmonized position of interviewees on the land management gaps accounting for the protracted open-air trading in Ajaka market. The group mean indicated that lack of formal space planning standards is a major factor responsible for persistent open-air trading. Ranked 2nd, 3rd, 4th, 5th and 6th on a grouped basis are violation of easements, absence of modern infrastructure, poor development control, local council's mismanagement of revenue generated from the market and dilapidation of market infrastructure. It may be deduced that trading-, shopping-, and managerial experiences as against academic- and vocational training of respondents actually informed their responses with respect to the failure of market forces in allocation of market space. Although there is no statistical test of significance conducted on each land management gap, it can be deduced from group ranking in Table 5 that failure of market forces in the allocation of market space is not among the five major determinants of open-air trading.

Table 5: Ranking of the impact of land management gaps on persistence of open-air trading

Land management gaps	Respondents						Group	
	Market traders		Customers/ Community		Premises managers			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
absence of formal space planning standards	3.98	3	4.23	2	4.52	1	4.24	1

violation of easements	4.16	1	4.29	1	4.27	2	4.24	2
absence of modern infrastructure	3.92	4	4.18	3	4.07	5	4.06	3
poor development control	3.84	5	4.05	5	4.17	3	4.02	4
local council's mismanagement of revenue generated from the market	4.00	2	4.12	4	3.82	7	3.98	5
dilapidating market infrastructure	3.68	6	3.98	6	4.11	4	3.92	6
Incidence of squatter traders and food hawking	3.57	7	3.91	7	3.88	6	3.79	7
failure of land market towards market space allocation	3.09	9	3.41	8	3.78	8	3.43	8
poor enforcement of environmental protection measures	3.15	8	3.05	9	3.52	9	3.24	9
evasion of market taxes and levies	3.01	10	2.98	10	2.62	10	2.87	10

Inference can be drawn from Table 5 that policy actions geared towards addressing these land management gaps and curb open-air trading should consider the order of impact of these gaps as captured from the harmonized opinion of all stakeholders.

To further assess the level of consensus reached by respondents with respect to land management gaps, results of bivariate spearman's correlation analysis and level of significance in Table 6 indicate significant relationship between ranking of land management gaps by all stakeholders.

Table 6: Bivariate correlation analysis of respondents' assessment of land management gaps

			Traders	**Customer/ community**	**Premises managers**
Spearman's rho	**Traders**	Correlation Coefficient	1.000	0.952**	0.745*
		Sig. (2-tailed)	.	0.000	0.013
		N	10	10	10
	Customer/community	Correlation Coefficient	0.952**	1.000	0.855**
		Sig. (2-tailed)	0.000	.	0.002
		N	10	10	10
	Premises managers	Correlation Coefficient	0.745*	0.855**	1.000
		Sig. (2-tailed)	0.013	0.002	.
		N	10	10	10

**. Correlation is significant at $p < 0.01$ (2-tailed).

*. Correlation is significant at $p < 0.05$ (2-tailed).

Furthermore, one-way ANOVA in Table 7 could not establish any variation in ranking of land management lapses accounting for open-air trading. Besides validating the ranking of these land management gaps, it has been established that there is a consensus among all respondents concerning problems accounting for persistent open-air trading in the study area.

Table 7: One-way ANOVA test for significance of variation in respondents' perspective of land management gaps

Source	SS	df	MS	F-ratio	Sig (p-value)	Remarks
Between groups	0.304	2	0.152	0.171	0.846	NS
Within groups	6.207	7	0.887			
Total	6.511	9				
Inference: (NS) Not significant at $p < 0.05$						

5.3 Land management toolkits for the control of persistent open-air trading

Respondents were asked to assess the relevance of land management tools towards combating open-air trading in the study area. Group mean response and corresponding rankings in Table 8 indicated that space management tops all land management toolkits. Ranked 2nd, 3rd, and 4th on a grouped basis are development control, land allocation (consolidation), and market redevelopment. A tie in dispute resolution and land use mapping and planning accounts for the 5th tool in the group rank. The ranking of dispute resolution among the first five tool kit is an indication that the absence of formal space planning standards and violation of easements require adequate intervention to pave the way for successful land use mapping and planning in the market.

Owing to population increase and the strategic location of Ajaka market, there is a strong chance for land expropriation to cater for future expansion. On a group basis however, land expropriation was ranked 7th implying that it may not be an urgent intervention toolkit for open-air trading in the market and its environs.

Table 8: Rank analysis of land management toolkits for combating open-air trading

Land management toolkits	Respondents						Group	
	Market traders		Customers/ Community		Premises managers			
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Space management	4.37	1	4.31	1	4.52	2	4.40	1
Development control	4.20	2	4.22	3	4.73	1	4.38	2
Land allocation (consolidation)	4.02	6	4.21	4	4.22	3	4.15	3
Market redevelopment	4.17	3	3.92	10	3.98	6	4.02	4

Dispute resolution	4.09	4	3.96	9	3.88	7	3.98	5
Land use mapping and planning	3.46	8	4.27	2	4.20	4	3.98	5
Land expropriation	4.03	5	4.14	5	3.68	9	3.95	7
Land information system	3.68	7	4.03	6	3.76	8	3.82	8
Land value capture	3.28	9	4.02	7	4.00	5	3.77	9
Taxation and fines	2.76	10	4.01	8	3.22	10	3.33	10

Ranked 8th, 9th, and 10th are Land information system, Land value capture, and Taxation and fines respectively. The aggregate ranking is reasonable considering the fact that efficient land value capture and revenue generation from land uses is anchored on a database of market traders and their allocated space.

Table 9: Bivariate correlation analysis of respondents' assessment of relevant land management toolkits

			Traders	**Customer/community**	**Premises managers**
Spearman's rho	**Traders**	Correlation Coefficient	1.000	0.248	0.527
		Sig. (2-tailed)	.	0.489	0.117
		N	10	10	10
	Customer/community	Correlation Coefficient	0.248	1.000	0.648*
		Sig. (2-tailed)	0.489	.	0.043
		N	10	10	10
	Premises managers	Correlation Coefficient	0.527	0.648*	1.000
		Sig. (2-tailed)	0.117	0.043	.
		N	10	10	10

*. Correlation is significant at $p < 0.05$ (2-tailed).

Spearman's Bivariate correlation analysis in Table 9 indicates a significant relationship between premises managers' and customers'/community's choice of land management toolkits for combating open-air trading in spite of the 0.648 correlation coefficient. While this may not be enough to validate the group ranking in Table 8, ANOVA test was deployed in Table 10 to test for significant variation in preference for each land management toolkit among the three stakeholders.

Result of the ANOVA test in Table 10 indicates that there is no significant variation in respondents' order of preference for the land management toolkits. The implication of this result is that while the ranking in Table 8 is validated, the major stakeholders in the market are desirous

of application of land management toolkits in phases for the purpose of combating open-air trading and improving the infrastructural condition of Ajaka market.

Table 10: One-way ANOVA test for significance of variation in respondents' preference for relevant land management toolkits

Source	SS	df	MS	F-ratio	Sig (p-value)	Remarks
Between groups	0.484	2	0.242	0.410	0.678	NS
Within groups	4.132	7	0.590			
Total	4.616	9				
Inference: (NS) Not significant at $p < 0.05$						

Information from the market chief (*Onuh Aja*) indicated that in spite of their status as traditional market premises managers, they receive no support from the Local Government Council. He reiterated that the Council is only interested in the revenue they generate from market levies. From the market chief's statement and field observation conducted, it can be deduced that the market has not received developmental attention of the local government for over three decades of the Nigerian Local Government Reforms of 1976. One of the respondents noted that the open-air trading phenomenon can only be ameliorated stressing that any attempt to abolish it could be met with stiff resistance from majority of the illiterate traders who may not be able to afford rented market stalls if available. Taking cognizance of this respondent's view, stakeholders and policy makers desirous of a transition from open-air trading to organized markets should be ready to adopt high-level moral suasion during the process of community participation campaigns in order to convince rural traders on the benefits of selling under market stalls and purpose built-shops.

While poverty and inability to pay rents for conventional stalls in rural markets constitutes a major problem for rural market redevelopment (Tomori, 1997), the local council could adopt cheap and durable construction technology towards providing standard and affordable market shelter. The essence of this stride is to ensure that all classes of traders are accorded access to market shelter and trading space according to the size of their merchandise and rent they can afford thereby achieving an organized market for the benefit of all stakeholders

6. RECOMMENDATIONS AND CONCLUSION

In view of the findings contained in this research, it is recommended that:

1. traders in Ajaka market should organize themselves through a pressure group for the purpose of sustainable market planning and development;
2. all land management gaps no matter the order of significance should be accorded attention by market organization and the local government under whose constitutional jurisdiction the management of market premises falls;

3. land management toolkits should be implemented in phases and in consultation with all stakeholders in order to resolve the problems associated with persistent open-air trading in rural assembly markets; and
4. capacity building is required to bridge the gap between customary land management practice and rural commercial premises management. Therefore, formal training and re-training of premises managers in charge of rural assembly market is imperative.

The take-off and operability of market infrastructure requires land and good land management practices. While this study addresses dimensions and magnitude of land management gaps accounting for persistent open-air trading in rural markets, the caveat for policy makers is that toolkits for the resolution of these gaps may vary significantly in the order of importance or relevance when applied to spatial problems arising from other rural land uses let alone the regeneration of inner cities and urban consumer markets in developing countries.

This study has unveiled the consensus among major stakeholders in rural markets concerning their strong desire for land management toolkits in order to ameliorate the spate of open-air trading arising from gaps in land management practices. While the success of recommendations posed in this study depends on vibrant public-private partnership, it is not out of place that stakeholders hold the local government accountable for the revenue generated from rural markets as these funds could be used to defray the cost of implementing each land management toolkit.

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