

Land Use Classification and Informal Sector Question in Ogbomoso, Nigeria

M. O. Jelili and A. A. Adedibu

*Department of Urban and Regional Planning, Ladake Akintola University of Technology,
Ogbomoso, Nigeria*

KEYWORDS Infiltration. Urban Space. Land Use Types. Informal Sector Activities

ABSTRACT Against the background of uncontrolled infiltration of informal sector activities in virtually every segment of urban space, especially along major roads of cities, this paper examines the pattern along two federal roads in Ogbomoso, Nigeria. The study which employs Descriptive and Correlation Analyses observed that while certain land use types are more generators of informal sector enterprises than others, there is a significant positive relationship between land use intensity and incidence of informal sector enterprises. With distance between one electric pole and the third one as measurement unit data was obtained about land use and incidence of informal sector enterprises by direct observation and recording by trained research assistants. A regression modeling is therefore recommended for further studies to establish a system of incorporating informal sector activities into land use allocation process

INTRODUCTION

In spite of the increasing awareness of the importance of land use or modern planning, maintaining orderliness and sanity in cities of at least the developing countries has been more of a dream or theoretical phenomenon than a physical “artifact”. The problem of physical disorder and its attendant issues of unsustainable urban growth and environmental inadequacies are a clear manifestation of the failure of land use planning and planners to recognize and incorporate certain aspects of urban complex into the land use allocation process, and device specific tools of administering or managing them. Prioritized in this paper is the informal sector syndrome, which has remained a serious headache to land use zoning or classification perhaps because it is more peculiar to the environments or countries that are alien to the origin of traditional or modern planning tools and techniques than other issues.

The proliferation of informal sector enterprises in virtually every segment of urban space especially close to residences has been observed to pose a serious threat to land use classification and planning (Sarin, 1982; Dasguta, 1987; Tipple, 1993). Yet, they are regarded as a vital economic tool or a quick resort not only to the operators or service providers but also to the consumers of the goods and services provided by this sector in the less developed countries. The growth of the sector in Nigeria, for instance, has been attributed to untold

hardships brought about by the economic recession with a particular reference to the Structural Adjustment Programme of 1988 (CBN, 1988; Okeke, 2000).

Nevertheless, the simple truth is that while informal sector enterprises have become an established phenomenon, land use planning can not but strive to achieve orderliness in cities. This therefore demands a new or refined land use planning tool or technique which can not surface unless the spatial distribution pattern and relationship between the informal sector activities and other land uses are appreciated. This is the main object of this work.

Although attempts have been made to explain the pattern and implications to planning by earlier researchers (Okeke, 2000; Onyebueke, 2000), their approaches based on neighborhood only reflect the socio-economic factors of the neighbourhood more prone to the informal sector infiltration than others, but may not reflect the actual locations of such enterprises with respect to the capacity of certain locations or transport corridors to attract such businesses and their patronizers. This is a challenge of this paper, which seeks to analyze the effect of informal sector enterprises on land use classification along the two major roads of Ilorin-Ibadan and Ikirun-Igbeti in Ogbomoso. It shall examine the relationship between informal sector enterprises and certain categories of land use as well as land use intensity. It is therefore hypothesized that there is no significant relationship between incidence of informal sector enterprises and land

use type, juxtaposition and intensity along the major roads in Ogbomoso.

Ogbomoso: An Overview of the Land Use and Informal Sector Problem

Ogbomoso remains the second largest city in Oyo state after Ibadan; and it is one of the cities to reckon with in the southwest, if not in the whole Nigeria.

Like other traditional cities in the country, its development started from the traditional core where central mosque retail trading or market, blacksmith, and other traditional informal sector activities are juxtaposed with residences to form an activity nucleus or traditional central business district (CBD) around the king's palace from where development radiates outwards especially in line with the direction of road development. This juxtaposition was never a problem however, but a welcome phenomenon serving the purpose of complementarities, to the traditional inhabitants.

With the expansion of the city especially since the 1990s and conversion of dwelling units (or parts thereof) along major roads particularly Ilorin-Ibadan and Igbeti-Ikirun roads into undesignated and incompatible uses to give room for various informal enterprises, the problem has become manifest. It is appalling to note that from Federal Government College area to Oke-owode along Igbeti-Ikirun road, and from Isale-General to Ogbomoso High school area along Ilorin-Ibadan road hardly can one see a single building that is completely put into use for which it is meant or approved. The degree of derailment which varies from one part of the roads to the other can not be unconnected with the concentration of such informal sector businesses as small retail trades, supermarkets, saloon, tailoring and other services, cottage industries, mechanic and related workshop, among many others.

The problem is getting worse everyday, and today it is no more a news to have squatter shops and workshops or worse still filling stations "squeezed" into every open space (or created space by demolition of residential buildings) within residential neighborhoods along these roads.

Literature Review

Different scholars have carried out a

considerable number of studies on informal sector. In such studies, the concept, distribution among neighbourhoods, role in urban economy, as well as implication of informal sector enterprises to land use planning, among other aspects have been dealt with.

The informal sector has been conceptualized from different perspectives leading to different definitions to reflect different criteria upon which the definitions are based. Using the number of employers or worker, Sethurama (1976) describes an urban informal enterprise as a firm employing ten or less full-time workers with the exception of the liberal professionals. In line with the definition, and in agreement with ILO (1972), such characteristics of informal enterprises as easy entry and exit; reliance on indigenous resources, family ownership; small-scale, labour intensive and adapted technology; skills acquired outside the formal school system; unregulated and competitive market, and lack of legal or government recognition, are cited by Onyebueke (2000).

With respect to the activities engaged in, Okeke (2000) describes the sector as involving activities, which range from liberal professional practice, retail trading and cottage industries to utility services, urban agriculture and such financial networks as the rotating savings and Credit Association, pawnbrokers and money changers.

Nevertheless, and by whatever perspective we see it, the fact is that the informal sector, in the developing countries, not only plays a significant role in the urban economy, but has also become part of the culture of urban residents, particularly the low-income people who constitute the majority. A considerable number of studies have supported this.

According to Turner (1976) and Janathan and Halder (1987), a harsh economic climate and increasing demand for urban life can be attributed to the growth of the sector. This is in addition to the earlier study, which identifies the need for savings in transportation costs, and time as impetus to the growing of home-based enterprises (Janathan, and Halder, 1987).

Of particular interest are the findings of Strassman (1986), Onyebueke (1987 and 2000) and Okeke (2000), among others, that the incidence of informal or home-based enterprises is related to neighborhood characteristics. They argue that they are more prevalent in neighbor-

hoods of lower socio-economic background than the higher ones. This view is supported by Lacqian (1983) when he argues that a low income house and community are essentially multifunctional units.

Providing socio-cultural reason for the appearance of home-based enterprises in urban neighbourhood, Obudho and El-shakhs (1979) argue that the informal sector component of the urban economy is one of the peculiarities that depict the uniqueness of African urban system.

It is interesting to note that in spite of lack of land use planning regulative measures that integrate the informal sector into the land use allocation process, the advocates of the system fromn at seeing the house as mono-functional, but call for the recognition and enhancement of such home-based enterprises (Afrane, 1987; Onyebueke, 1997).

Seeking for means of integrating the informal sector into land use allocation process of the urban complex is the pre-occupation of this study, like those of Onyebueke (2000) and Okeke (2000) among other workers. While the earlier studies were based on the neighbourhood, this study is justified on the need to identify the linear pattern (distribution along roads) of the informal sector enterprises.

METHODOLOGY

This study was based on primary data obtained from observation and recording of information by trained research assistants along seven designated transport corridors. These include High-School to Care-taker junction (corridor A1), Care-taker junction to Takie junction (corridor A2), Takie junction to Oja-tuntun (corridor A3), Ojatuntun junction to General (corridor A4), Ikoyi Motor-park to Takie junction (corridor B5), Takie junction to Ojagbo Central Mosque (corridor B6), and Ojagbo Central Mosque to Ogbomosho Grammar School (corridor B7).

The survey adopted the distance between one electric pole and the third one as a measurement unit at which such pieces of information as the dominant land use type, available number of uses, land use intensity, and concentration of informal sector activities were recorded in zigzag manner to cover not less than a half of both sides of the two main roads of Ilorin -Ibadan and Ikirun-Igbeti in the town. A total of 120 measurement units were covered along the two major roads.

The dominant use is that which occupies the largest proportion of space, depending on the judgment of the observer. Land use intensity was given different weights which are sums obtained from the observed number of floors of buildings, and other structures, with a floor taking 5 and a kiosk or stall taking 1. Concentration of informal sector activities was also assigned similar weights of 5 per floor, 3 per plot not built on but being used for such, 1 per shop, and ½ per kiosk or stall. These indices are similar to what Onyebueke (2000) devised as a surrogate of incidence of informal enterprises, which he called relative distribution intensity (RDI).

The obtained indices of incidence (concentration) of informal sector activities and land use intensity were correlated with level of juxtaposition of land uses (number of available uses) to determine the relationship between them.

FINDINGS AND DISCUSSION

The study reveals a recognizable pattern of land use across the designated transport corridors.

Table 1 reveals that corridor A4 (Ojatuntun to General) with residential, commercial and light/ service industrial land uses as the predominant land use types, has the highest incidence of informal sector enterprises with a proportion of about 26%. This is followed by corridor B6 (Takie to Ojagbo) with predominant land use type observed to be residential/ commercial and 22.06% of the total incidence of informal sector enterprises. Corridors A2 (caretaker to Takie) and A1 (High School to Caretaker) in that order have the least concentration with about 4.3% and 7.2% respectively of the total incidence of informal sector enterprises, and commercial/public and residential/commercial as their respective predominant land use types. It should be noted that while the observed residential land use refers to the various categories of dwelling units, commercial land use varies from commercial banks, supermarkets, filling stations, to retail shops, stalls or kiosks, among others. The public use on the other hand includes mosques or churches, post-office, NITEL, schools, etc, while light/service industries include mechanic, welding, vulcanizing and related workshops, as well as barbing, hairdressing, tailoring, computer centers, and other services.

Table 1: Transport corridor, predominant land use type and incidence of informal sector enterprises.

Transport corridor	Description	Predominant land use type	Informal sector Enterprises	
			Incidence	%
A1 A2 A3	High school to	Residential/Commercial	246 147	07.20
A4 B5	Caretaker Caretaker to	Commercial/Public	286 887 477	04.30
B6 B7	Takie Takie to	Commercial/Industrial/public	752 614	08.40
	Ojatuntun Ojatuntun to	Residential/Commercial/industrial		26.02
	General Ikoyi Motor	Residential/Comm/pub/industrial		14.00
	Park to Takie Takie to	Residential/Commercial		22.06
	Ojagbo Ojagbo to	Residential/Comm/Pub/industrial		18.02
	Grammar school			
Total			3409	100.00

Source: Author's field work 2005.

It is important to note that the occurrence of commercial land use as one of the predominant land use types in every corridor is in support of the fact that most major roads in most traditional Nigerian cities today are assuming a status of business thoroughfares. It should be noted also that the two corridors with highest incidence of informal sector enterprises are high density squatter settlements of mostly Hausa people (Sabo) and indigenous core area of the town while the two corridors with the least incidence are between Takie and High school area which are relatively new areas. The pattern may not be unconnected with the low socio-economic status of the people of the areas in agreement with Okeke's (1997 and 2000) findings.

Relating the incidence of informal sector enterprises with predominant land use types however, Table 2 shows that commercial land use is the largest generator of informal sector enterprises (59.28%). This is followed by residential land use with a considerable proportion of 25.4% of the total informal sector incidence. There is, however, a low incidence of the informal sector enterprises in public and other land use types. The reason for this pattern may be that while most informal sector enterprises are small scale businesses which are mostly commercial, they are also a common feature of low income urban residential neighbourhoods which are the major residential areas in the study area.

The Correlation Analysis of the incidence of informal sector enterprises (IISE), land use juxtaposition, measured by number of uses, and land use intensity all per measurement unit below shows that while IISE may not be related with the number of uses available, there is a significant

positive relationship between it and land use intensity (Table 3). With correlation coefficient (Pearson Product Moment), r , which is significant at 0.01 alpha level, one infers that as land use intensity along the roads increases more informal sector enterprises spring up. This may not be unconnected with the fact that most of informal enterprises provide supplementary goods and services to the major land use(s) in the vicinity.

Table 2: Land use types and Incidence of Informal Sector Enterprises (IISE)

Land Use Type	IISE	Percentage
Residential Commercial Public	866	25.40
Industrial (light/ service) Others	2021	59.28
	117	03.43
	392	11.15
	13	00.30
Total	3409	100.00

Source: Author's field survey, 2005.

Table 3: Correlation analysis of the Incidence of Informal Sector Enterprises (IISE), Land use intensity (LUI) and Juxtaposition (LUJ).

Variables	LUJ	IISE	LUI
LUJ	1.000	0.042	0.078
IISE	0.42	1.000	0.5898*
LUI	0.078	0.589*	1.000

*Correlation is significant at the 0.01 level (2-tailed).
Source: Author's Computation (2005).

CONCLUSION, PLANNING IMPLICATIONS AND RECOMMENDATIONS

This study has indicated that incidence of informal sector enterprises is related to land use

type and intensity as well as transportation corridor and neighbourhood characteristics.

It is observed that a significant positive relationship exists between the incidence of informal sector enterprises and land use intensity. This is in addition to the fact that certain land use types are more generators of informal enterprises than the others, with commercial and residential land uses observed to top the list.

With the observation, however, that informal sector enterprises are not only a common feature of low income urban residential neighbourhoods and squatter settlements but also provide supplementary services to the major land uses in the vicinity, it becomes imperative that the sector is well integrated into land use planning process.

With the establishment of a positive relationship between the incidence of the sector's enterprises and land use intensity, this study is of the opinion that in the land use allocation exercise for an area, a linear regression analysis of the two variables will reflect what amount of physical development would produce a certain incidence of informal enterprises. The modeling will go a long way in addressing the problem of incorporating informal sector into in to land use allocation process. This can be achieved by making use of the indices of incidence of informal sector enterprises and land use intensity as used in this paper, or the surrogate of incidence used by Onyebueke (2000) to build regression models. This would go a long way in making a rational decision as regards land allocation with incorporation of informal sector enterprises not only in urban residential neighbourhood but also in civic centers or other urban areas of certain major land uses.

The study also recommends similar studies in a non-traditional cities and comparative analysis of two or more studies to see whether or not there is a significant difference in the patterns along major roads of different cities.

REFERENCES

Afrane, S.K.: Job creation in Residential Areas: A

- Comparative Study of Public and Private Residential Communities in Kumasi, Ghana. In: *Income and Housing in Third World Development, Proceedings of an International Seminar held in New Delhi, India*, 30th November to 4th December (1987).
- Central Bank of Nigeria (CBN): *Annual Report and Statement of Accounts* for the year ended 31st December 1997 (1999).
- Dasguta, A.S.: Spatial Planning and Home-based Economic Activities: Design Considerations. In: *Income and Housing in Third World Development, Proceedings of an International Seminar held in New Delhi, India*, 30th November to 4th December (1987).
- ILO: *Employment, Income and Equality General*. ILO, Geneva (1972).
- Jannathan, N.V. and Halder, A.: *Income-Housing Linkages; A Case Study of Pavement Dwellers in Calcutta*. NDS, Calcutta (1987).
- Lacquan, A.A.: *Basic Housing: Policies for Urban Sites, Services, and Shelter in Developing Countries*. IDRC, Ottawa (1983).
- Obudho, R.A and El- Shakhs: *Development of Urban System in Africa*. Praegar Publishers, New York (1979).
- Okeke, D.C.: Urban Land Use Planning and Informal Sector Syndrome: A case study of Enugu. *Journal of the Nigerian Institute of Town Planners*, **13**: 56-65 (2000).
- Onyebueke, V.U.: The Changing Image of the House and the Challenges of Housing for the Low-Income Urbanites in Nigeria. In: *The House in Nigeria; Proceedings of the National Symposium, held at the OAU, Ile-Ife*, 23rd to 24th July (1997).
- Onyebueke, V.U.: Incidence of Informal Sector Enterprises in the Urban Residential Zone: Analysis of the Pattern and Determinants in Enugu" *Journal of the Nigerian Institute of Town Planners*, **13**: 1-25 (2000).
- Sarin, M.: *Urban Planning in the Third World: The Chandigarh Experience*. Mensell Co. Ltd., Oxford (1982).
- Sethurama, S.V.: The Urban Informal Sector: Concepts, Measurements and Policy. In: *Training for Work in the Informal Sector*. Fred Fluitman (Ed). ILO, Geneva (1976).
- Strassman, W.P.: *Types of Neighbourhood and Home-Based Enterprises: Evidence from Lima, Peru*. Urban Studies, Glasgow (1986).
- Tipple, A.G.: Shelter as Workplace: A Review of Homo-Based Enterprises in Developing Countries. *International Labour Review*, 32(4): 36 – 44 (1993).
- Turner, J.F.C.: *Housing by People: Towards Autonomy in Building Environments*. Marian Boyers Publishers Ltd., London (1976).